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Government-guaranteed credit and populism

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Abstract

The phenomenon of political populism and its financial determinants have proved elusive. We utilise the sudden and uneven change in credit conditions during the COVID-19 pandemic and the unprecedented government credit guarantee programme in France to investigate whether liquidity support to firms affects political preferences. Drawing on credit registry data – which provides the universe of loans and credit lines to firms – we build a postcode-municipality-level dataset and show that government-guaranteed credit reduced the support for the far right but increased it for the incumbent. The underlying economic channel shows that credit guarantees preserved employment, which in turn influenced political preferences. Effects are driven by microenterprises, predominantly self-employed businesses in which the employee-owner-voter is fully aware of the government financial support, i.e., where government support is more salient. This study does not aim to evaluate policies to address the popularity of populist politics.

Keywords: Firms, Credit, Government guarantees, Fiscal policy, Populism

JEL classification: D72, E44, G18, G21, H81

Non-technical summary

In recent years, the increasing electoral success of populist parties has drawn increased attention from the economics and finance literature. Beyond societal implications, the rise of populism has direct and indirect effects on economic policy-making. Populist economic policies might negatively impact macroeconomic performance and public finances, leading to lower GDP per capita and higher debt burdens. Additionally, populist politics may influence support for central bank independence, impacting monetary policy decisions and financial market outcomes. Political pressure has been linked to higher inflation, emphasising the relevance of political dynamics in monetary policy-making.

While various factors like culture, technology, and demographics have been put forward to explain this phenomenon, economic conditions clearly play a significant role. Most research on the economic dimension of populism examines its causes, but little attention has been paid to factors that could offset this trend. This study addresses this gap by exploring fiscal support for access to finance, more specifically estimating the effectiveness of government credit guarantees in France as a case study.

By analysing French credit registry data, we establish a link between positive local shocks to credit conditions, government financial support, and electoral results. The paper finds a clear negative relationship between the share of government-guaranteed credit and the change in support for the populist far right, particularly guarantees to microenterprises (small or self-employed businesses). The paper focuses on the far right since it advanced to the second round of presidential elections in the last two elections in 2017 and 2022.

The results suggest that government credit guarantees can significantly reduce support for far-right populist candidates. In our empirical estimation, guarantees led to about 138 thousand fewer votes for the far-right candidate in the 2022 French presidential election. Although not decisive for the outcome, this impact is politically significant.

To understand the economic mechanism, the study explores various channels, with employment protection emerging as the primary driver. Credit guarantees help preserve jobs, thereby reducing support for populist right-wing movements. However, the positive effect in reducing far-right support is less pronounced in areas with better resilience to the COVID-19 shock, measured as changes in firms' turnover over the pandemic.

1 Introduction and motivation

Ever since the forceful arrival of the phenomenon of extreme voting behaviour in Europe and the United States, the economics and finance literature has taken a renewed interest in the phenomenon of populism. While many competing explanations for the rise of support for populist parties and policies have been advanced—cultural, technological and demographic among others (Cantoni et al., 2019; Margalit, 2019; Norris & Inglehart, 2019)—economic factors are clearly among the driving factors in many countries, and more prominently so after the Great Financial Crisis (GFC) of 2008-9 (Guriev & Papaioannou, 2022).

Most of the literature on the economic causes of extreme voting behaviour focuses on its causes and determinants, neglecting aspects that might prevent or slow its rise, Guriev and Papaioannou (2022, p. 756). At the same time, the political consequences of changes in financial conditions of firms and households, arising from changes in financial policy, remain under-explored in the literature. A notable reason for this lies in the relative lack of granular credit data to be mapped onto electoral behaviour, in contrast to trade and employment data.[1]

This paper seeks to fill these gaps by investigating an element of governments' economic policy potentially countervailing the rise of populist support: fiscal support to credit. Historical episodes (Braggion et al., 2020; Doerr et al., 2022) suggest that economic crises provide easy breeding grounds for populist politics, therefore economic policies that cushion the effects of economic crises potentially help in reducing populist appeal. The evidence presented in this paper sheds light on credit and government guarantees as overlooked but crucial intervening factors in the reciprocal relationship between politics and the business cycle.

For identification, the analysis relies on a sudden and unexpected change in credit conditions stemming from the COVID-19 government credit guarantee programme in France, and study how the financial conditions of micro, small and medium (SMEs), and large enterprises affected voting behaviour, with a focus on the support for right-wing populist parties and candidates. Drawing on French credit registry data—which provides the universe of loans and credit lines to firms—this paper identifies for *each* firm the amount of government-guaranteed credit. In this respect, our approach is closest to Gyöngyösi and Verner (2022), in that we draw on credit registry data and combine it with postcode-level electoral outcomes. This dataset enables us to establish a robust link between a positive *local shock* to credit conditions, government financial

[1] Existing studies have relied either on survey data (Ahlquist et al., 2020), newly collected data (Doerr et al., 2022) or cross-country comparative studies (Funke et al., 2016).

support and electoral outcomes.[2]

Government-guaranteed credit is aggregated at postcode-municipality level according to firms' incorporation addresses to construct our main explanatory variable: the share of government-guaranteed credit in total credit at postcode-municipality level.[3] The advantage of using credit registry data—compared to bank-level data—and the information on firm location contained within is that it allows a geographical mapping of guaranteed credit with political outcomes. Credit data is merged with administrative and census data and electoral data at postcode-municipality level, to construct a series of control variables used as standard socio-economic and demographic determinants of voting behaviour in the literature. Importantly, control variables for COVID-19 incidence are added since the impact of the pandemic is assumed to be correlated with the demand for credit.

An important caveat is that the dataset lacks employees' constituency addresses. Therefore, our identification strategy is based on the *assumption* that the postcode-municipality of firms' incorporation addresses correspond systematically with the electoral constituency of firm employees. We argue that this assumption is, however, very likely to hold for microenterprises and SMEs which drive the bulk of the results.

The paper proposes an identification strategy leveraging credit registry data and focusing on firm sizes. In particular, in smaller firms—such as microenterprises which are predominantly self-employed businesses—there is a more visible and tangible relationship, i.e., lack of asymmetric information or incomplete information, to the *receipt* of government credit guarantees compared to employees of large firms who might not be aware of such credit provided to their employer in the first place. In other words, employees of large firms are more likely to have an incomplete information set. Therefore, the identification link between the receipt of government credit guarantees and voting behaviour is more direct in smaller firms.[4]

The results indicate a robust negative relationship between the share of government-guaranteed credit and change in support for the populist far right. The effects are statistically and economically significant: in our preferred specification (see Table 6), government guarantees reduce support for the far right by approximately 0.43 percentage points. This amounts to 6% of the

[2] Bagues and Esteve-Volart (2016) present evidence that exogenous positive economic conditions increase voter support for incumbent parties.

[3] For more details on the postcode-municipality definition, see Section 3.1.

[4] As a limitation of the used data, it does not allow for the observation of individual voting behaviour that would allow for an even cleaner one-to-one identification of the effects of government guarantees on political preferences.

seven percentage point increase in far-right support in the second round of the 2022 presidential elections compared to 2017. This estimate suggests that government credit guarantees led to about 138 thousand fewer votes for Marine Le Pen. Although these numbers were not decisive for the outcome of the 2022 French presidential election, they are politically significant. Two-thirds of the effect is driven by the significant effect in microenterprises and the reminder by small enterprises. For medium and large enterprises, the impact is not statistically different from zero. In a series of tests, we show that these results are robust to several alternative specifications and also for legislative elections in France.

To understand the underlying economic mechanism, the study explores several channels[5] that can shed more light on the relationship between government-guaranteed credit and political preferences. In a two-stage least square procedure, employment protection emerges as the main driver of the effects: credit guarantees helped protect jobs in the first place and in turn reduced the support for the populist right.

Policy considerations. It is important to note that the findings presented in this study do not aim to evaluate policies to address the political popularity of populist politics. Nor does it make a relative judgement about other economic policies that might have effects on political outcomes (i.e., investment in good education, effective anti-corruption campaigns etc.). The paper solely aims at estimating the effect of government-guaranteed on voting behaviour. The policy interpretation of our study of government-guaranteed credit, a policy designed to address the economic impact of the COVID-19 pandemic, would likely change if its main goal had been to subsidise credit for political purposes.

More broadly, the phenomenon of populism matters beyond its broader societal implications because of its indirect and direct effects on economic policy-making: on domestic macroeconomic policy and the environment for optimal central bank policy.

First, extreme economic policies pose a risk to macroeconomic performance and public finances. Wide-scale quantitative evidence, using synthetic control methods, estimates that GDP per capita and consumption are 10% lower under populist leadership over a period of 15 years. Debt burdens and inflation are higher under populist rule (Funke et al., 2022). The impact of populist economic policy on the macroeconomic environment is thus of high relevance to

[5] Alternative channels explored included employment, number of firms, firms change and firm financial turnover.

policy-making institutions.[6]

Second, populist politics can have implications for political support of central banks' monetary policy and for financial market outcomes. Despite entrenched central bank independence in Europe, continued political support for central bank independence has been shown to be important for optimal monetary policy decisions (for a cogent discussion, see Goodhart & Lastra, 2018; for empirical evidence on the relationship between populism and central bank independence, Agur, 2018; for a theoretical model Masciandaro & Passarelli, 2020). As has been recognised, "In Europe, support has risen for populist parties that generally do not favour central bank independence and advocate a return to national currencies" (Mas et al., 2020, p. 24). Fraccaroli et al. (2022) show that in hearings of the ECB at the European Parliament, Members' of the European Parliament (MEPs) positions on the ECB are linked with the ideological stance for anti-European parties more than for traditional left-right classifications. This is highly relevant for monetary policy making, as evidence shows that political pressure on the central bank is associated with higher inflation on average (Binder, 2021). Recently, it has been demonstrated that critical comments made by political leaders regarding central banks might have a negative impact on exchange rate volatility (see Çakmakli et al., 2023).

Related Literature. The most developed strands of work on economic explanations for populist support include the impact of globalisation, trade and technology on voters, (Autor et al., 2013; Malgouyres, 2017; Autor et al., 2020); the differentiated exposure to automation and technology on high- versus low-skilled workers increases inequality (Pástor & Veronesi, 2021), or the 'positional deprivation' of individual incomes within the income distribution (Burgoon et al., 2019). Closer to the finance literature, financial crisis have been associated to political polarisation (Mian et al., 2014; Frieden, 2015; Funke et al., 2016). More recently, the GFC has been linked to increased support for populist parties in Europe (Algan et al., 2017; Guiso et al., 2019). Populism has been found to be a result of the macroeconomic shocks (Gavresi & Litina, 2023) such as the backlash to austerity policies (Hobolt & Tilley, 2016; Fetzer, 2019), foreign currency household debt appreciation (Gyöngyösi & Verner, 2022), and the state of local government finances and borrowing costs and public finances mismanagement (Cunha et al., 2022;

[6]This has been noted by the ECB Financial Stability Review: "the increasing support for populist political parties which are seen to be less reform-oriented, may potentially lead to the delay of much needed fiscal and structural reforms and cause renewed pressures on more vulnerable sovereigns" (European Central Bank, 2016, p. 28)

Sartre & Daniele, 2022). Other studies have attempted to approach this question from the angle of a credit supply crunch in the aftermath of historical episodes of bank failures (Braggion et al., 2020; Doerr et al., 2022). More recently, during the GFC credit shocks have been associated with lower electoral success for Republican candidates in the United States (Antoniades & Calomiris, 2020) or increased preferences toward populist parties in Germany (Pizzigolotto & Fraccaroli, pre-published).

This paper adds to this strand of literature by providing evidence on government guarantees for credit as a novel channel of transmission of credit shocks to voting behaviour. The government-guaranteed credit channel is important due to: (i) the central role that credit plays in determining economic conditions such as employment and, (ii) the academic evidence on the link between credit shocks and political preferences.

In the remainder of this paper, Section 2 describes the setting for our analysis. An overview of our data is presented in Section 3, and the empirical strategy is provided in Section 4. Section 5 discusses the main results. This is followed by a number of robustness checks in Section 6. We conclude in Section 7 with policy implications.

2 The setting: coronavirus pandemic and political polarisation in France

In this section, we introduce the main setting for our analysis: the French government's COVID-19 credit guarantee scheme (Section 2.1), the rise of the far right in the country (Section 2.2) and the French electoral system (Section 2.3).

2.1 Government credit guarantee programme

As many countries in the euro area did during the coronavirus pandemic, the French government launched one of the largest state-guaranteed loan schemes, the *prêts garantis par l'État* (PGE). The PGE was launched on 23 March 2020, one week after the first lockdown, and was extended twice to run until 30 June 2022 (coinciding with the 2022 presidential and legislative elections). The headline envelope of the scheme was €307bn and it was implemented by the public investment bank Bpifrance. According to an analysis by the *Trésor*, under the scheme, €145 billion of state-guaranteed credit was actually extended to 700,000 firms by the end of 2021, primarily to

smaller firms to cover cash flow needs (Benitto et al., 2022).

The French government guarantee scheme is considered to have been carried out efficiently compared to other euro area countries, achieving a higher reach (Andersen et al., 2021, p. 15). The conditions of the loans consisted of pricing at very low cost—interest rates close to 0 per cent—a deferred repayment period of up to two years, and a total credit supply per firm up to 25% of a firm's 2019 turnover. To keep firms' incentives in check and avoid moral hazard, the guarantee coverage ratio was set at 90% for firms with up to 5000 employees and €1.5bn in turnover. Loan decisions were made by the banks through their underwriting process. As of 2021, 99% of recipients were either micro- or small- and medium-sized enterprises. Unsurprisingly, the take-up was highest in sectors most affected by pandemic lockdowns such as the accommodation and food sectors. Figure 1 shows the development of new loans and total loans guaranteed over time as well as their share of total new loans over time, starting from the beginning of the PGE in March 2020.

2.2 Rise of the French far right

For the purposes of our identification strategy, the political conditions in France make it an ideal and important laboratory to study the relationship between financial conditions and political behaviour. This is due to its political weight in Europe, the relative success and prominence of its populist movements, and the personnel stability of the political party leadership. Most closely associated with Marine Le Pen and the Rassemblement National (RN) [7] as well as her father and predecessor heading the RN, Jean-Marie Le Pen. For the purpose of our analysis of legislative elections, the populist far right also includes the recent ascent of Éric Zemmour and his party *Reconquête*. On the far left, Jean-Luc Mélenchon of *La France Insoumise* also falls under the populist classification, based on the *PopuList* database (Rooduijn et al., 2019). All of these parties are also classified as euro-sceptic. Figure 2 shows both the consistently relevant role of the RN in French politics since the 1990s as well as the party's increasing success in both presidential and legislative elections.

Before discussing our results in Section 5, we present some initial illustrations of the simple correlation between credit guarantees and support for far-right candidates in France.

First, Figure 3 shows that within a postcode-municipality there is a strong negative relationship between the share of credit guarantees to firms and the share of the vote for far-right

[7] Formerly known as the *Front National* until 2018.

candidates. Second, we illustrate this inverse relationship geographically, plotting the share of guarantees and the share of far-right votes on a map of municipalities in Figure 4. Smaller or negative changes in vote share are plotted in darker shades on the left, and higher shares of government-guaranteed loans are coloured darker on the right-hand side. The chart corroborates a strong unconditional relationship between the provision of government-guaranteed credit and the reduction in far-right electoral support. Data shows that this association is most pronounced in *Auvergne-Rhône-Alpes*, *Alsace–Lorraine*, *Pays de la Loire* and *Île-de-France*.

2.3 The French electoral system

At the national level, the French electoral system consists of elections for the National Assembly, i.e. legislative elections, and direct elections of the President of the Republic, i.e. presidential elections, both for five-year terms. In a two-round system, candidates need to receive an absolute majority of the votes to be elected. If not, a second round runoff election is held between the top two candidates in the presidential election (or candidates who received a vote share of more than 12.5% in the legislative election).

In 2022, this allows us to observe up to four rounds of voting in each constituency. However, since the analytical interest lies in the support for far-right candidates, we exclude the second round of the legislative elections because far-right candidates progressed to the second round only in a minority of constituencies, reducing the statistical power for the analysis. At the same time, Marine Le Pen, the main representative of far-right politics in France, advanced to the second round of the presidential election, leaving us with three rounds of voting.[8]

3 Data

This section presents the data sources and steps undertaken to create the dataset used in the analysis described in Section 4: electoral results data are from the government official sources, data on corporate credit and government credit guarantees are from the ECB's proprietary AnaCredit credit registry, census data on the electorate's socio-economic characteristics are from the French 2019 census. We integrate AnaCredit data on firms with the Insee 'Flores' enterprise census database from 2019; COVID-19 data on the incidence of the pandemic are at department

[8] We also do not include analysis of the 2021 regional elections, for which we do not hypothesise a link to national economic policy, given the predominance of local issues in regional elections.

level and come from French government official statistics.

The final dataset merges these sources and aggregates them at postcode-municipality level which is the main unit of measurement for our analysis. Summary statistics for the set of variables used in empirical analysis are presented in Table 1 for main electoral and credit variables.[9] Table 2 describes the socio-economic control variables, Table 3 shows the COVID-19 control variables at department level, and Table 4 summarises the firm-level variables.

3.1 Postcode-municipalities

The data is compiled and analysed at the level of the *postcode-municipality* (denoted by subscript i), which is defined as the smallest area that incorporates a discrete combination of postcodes and municipalities (identified by their unique Insee code). This is necessary since our credit data identifies the borrower's location by the postcode, while electoral data and control variables are available at the municipality level. We hereby account for the fact that postcodes can cover multiple municipalities and vice versa, leading to a *n:n* relationship in some cases. Our matching is based on French postcode data from La Poste's (2023) *Base officielle des codes postaux*. In our dataset there are 6,051 postcodes and 34,868 municipalities in Metropolitan France, resulting in 5,603 unique postcode-municipalities.

3.2 Electoral outcomes data

The dependent variable is the vote share of far-right candidates between the 2022 legislative and presidential elections (controlling for the respective previous rounds in 2017). French electoral data at the *commune* (i.e., municipality) level is published by the Ministry of the Interior (2022b). For the 2022 legislative and presidential elections, first and second round, candidates are classified into the categories "far-right", "centre-right", "centre-left", "far-left" and "NA" based on their party affiliation, relying on a combination of the Ministry of the Interior's officially-assigned "*nuances politiques*" and researcher coding.[10] By far the most significant party on the far right is the RN and its thrice-presidential candidate, Marine Le Pen.

[9] It is important to note that the summary statistics Table 1 shows statics at postcode-municipality level weighted by the number of registered voters and might slightly differ from official sources that use total numbers. For electoral outcomes, our data can be compared with official government statistics; see, for instance, results of the 2^{nd} round of the 2022 presidential elections (Ministère de l'Intérieur, 2022a).

[10] For the purposes of heterogeneity analyses, further categories including "incumbent" and "centre-right without incumbent" are created.

3.3 Credit data

Data on the main explanatory variables are from the euro area credit registry AnaCredit (Israel et al., 2017), containing information on all individual bank loans to enterprises with an outstanding amount above €25,000.[11] AnaCredit includes information on key bank and borrower characteristics such as credit volumes, loan rates, firm location, firm size and firm sector. The credit measure is composed of term loans *and* credit lines to non-financial corporations, including the undrawn credit line amount rather than only the outstanding amounts.[12].

Importantly, *AnaCredit* collects unique data on the collateral received for each loan contract, enabling us to identify whether the loan is subject to a government guarantee. For our purposes, loans originated after 23 March 2020 are coded as "guaranteed" if they have the French public investment bank Bpifrance, which acted as the unique guarantee provider in the PGE, listed as the guarantee provider.

Our main measures of interest are the *newly* originated loans covered by a government guarantee, divided by the outstanding nominal loan amounts. This is then aggregated across firms incorporated within the same postcode-municipality for the period 2020Q1[13] until the quarter of the respective election. Hence, the main explanatory variable is the *share* of government-guaranteed new loans at the postcode-municipality level, for each election. Since the final dataset is cross-sectional, the data on the share of credit guarantees and new credit change is winsorized at the 99% level to reduce the chance of outliers affecting the results.

3.4 Firm data

To investigate the relationship between government-guaranteed credit and voting behaviour across the size of firms, this study relies on the standardised definition by the European Commission (2003)[14], also embedded in the AnaCredit dataset.[15] We work under the assumption that for

[11] *AnaCredit* is the analytical credit register of the Eurosystem and additional documentation can be found here: https://www.ecb.europa.eu/stats/money_credit_banking/anacredit/html/index.en.html

[12] We exclude from our main measure revolving credit, overdrafts, convenience credit, extended credit, credit card credit, revolving credit other than credit card credit, reverse repurchase agreements, trade receivables and financial leases which are only marginally if at all guaranteed by the government

[13] Credit data is aggregated by quarters. We include 2020Q1 as the starting date since government-guaranteed credit disbursements began in March 2020.

[14] In line with the official definition by the European Commission, when discussing different firm sizes in out data and results, we refer to them as "enterprises". They are conceptually interchangeable with "firms".

[15] Firms are classified as a microenterprise if they employ fewer than 10 persons *and* whose annual turnover and/or annual balance sheet total does not exceed EUR 2 million; a small enterprise is defined as an enterprise which employs *fewer* than 50 persons *and* whose annual turnover and/or annual balance sheet total does not exceed EUR 10 million; enterprises which employ fewer than 250 persons and which have an annual turnover not

microenterprises—where the number of employees is lower, and most of them are self-employed business—the nexus between government credit guarantee and voting behaviour would be closer than in larger firms. In other words, the identification should improve. Summary statistics for enterprises by size classification are provided in Table 4.

In small and larger enterprises, the median number of employees is greater than 17, which makes it generally less likely that all employees are aware of firms' funding structure, such as receipt of government-guaranteed credit, and hence are being influenced by this decision. At the same time, microenterprises are mostly self-employed individuals, where decisions on obtaining a government guarantee for a loan are usually made by the owner herself.

Microenterprises have an average turnover of around €726'000. However, there is a wide dispersion in the number of employees across all enterprises' sizes, the median microenterprise has only one employee and a median turnover of around €267'000. Microenterprises are also the most common type of enterprise according to the credit registry and have also been assigned a higher probability of default by the banks' credit underwriting process, making them on average riskier counterparts for banks.

3.5 Control variables

The model needs to account for other variables that are commonly correlated with support for far-right candidates. We therefore include a number of socio-economic and demographic as well as COVID-19-related variables.

Election-specific variables are the number of registered voters and voter turnout, both from the Ministry of the Interior (2022b). Data on income (median standard of living in euros) come from FiLoSoFi *"Dispositif sur les revenus localisés sociaux et fiscaux"* (Insee, 2023c).

Socio-demographic characteristics comprise of: age (share of young persons, 15-29 years, and old persons, over 60 years old), the unemployment rate (among active 15-64 year old persons), education (share of persons aged over 15 years with a high school, vocational or higher education diploma), the share of female inhabitants. These are obtained from the 2019 census data (Insee, 2023b) and it is assumed that these basic variables remain reasonably steady and therefore do not change rapidly between 2019 and 2022. Change in overall population size from 1999 to 2019

exceeding EUR 50 million, and/or an annual balance sheet total not exceeding EUR 43 million. Large enterprises are those that are not classified in previous categories. Note that an enterprise can still have fewer than 10 employees and be classified as non-micro if it has a turnover and/or balance sheet greater than EUR 2 million, likewise small enterprises can have less than 10 employees but a turnover between EUR 2 and EUR 10 million.

is included to account for overall population growth. Data on the share of citizens with foreign nationality and the share of immigrants also come from the census (Insee, 2023e).

Structural economic variables on the corporate structure (share of small and large firms and start-ups) are also incorporated from the Insee 'Flores' (*Fichier localisé des rémunérations et de l'emploi salarié*) database (Insee, 2023d).[16] Note that this variable is important since not all firms rely on bank credit for financing, either because they do not require financing and use internally-generated cash for current expenditures and investments, or because their funding model is different. For instance, start-ups generally do not rely on bank credit for funding and hence are generally not recorded within the credit registry.

Given the centrality of the COVID-19 pandemic in both determining government economic support, changes in financing conditions and political attitudes, we take care to control for the social and economic impact of the pandemic. These are the average incidence rate (positive test rate), the average hospital intensive care occupancy rate and the total number of deaths in hospital from COVID-19, from the beginning of the pandemic to the date of the election. These are obtained from the *Synthèse des indicateurs de suivi de l'épidémie COVID-19* database, published by *Santé publique France* (2023). COVID-19 variables are included at the level of the *département* (of which there are 95 in our dataset) and denoted by subscript d in the analysis.

To take into account the impact of COVID-19 lockdowns on local economy and as a consequence on voting behaviour, we compute at the postcode-municipality level an indicator of the vulnerability of industrial sectors' revenues to COVID-19 lockdowns. The idea is that more radical voting behaviour manifests itself in areas where restrictions on population movement and closure of the economy were more impactful on local households and firms. To this end, we use the ORBIS database from Bureau van Dijk (2023) and compute revenues in 2019 and in 2020, i.e. before and during the worst phase of COVID-19, at industry level. We then sort industries by the loss of revenue and use the first quartile as a flag for vulnerable industries. We then compute the share of each vulnerable industry revenue within a postcode-municipality to use as control variable *COVID-19-impacted industries*.

[16] We use business demographic data from the census since it is more complete than the information contained in the credit registry.

4 Empirical strategy

This study relies on a quasi-natural experiment: the provision of government credit guarantees following the COVID-19 outbreak is used as an exogenous government support measure to support credit supply.

Specifically, the share of banks' supply of government-guaranteed credit to firms is assumed to be independent of voting behaviour, and hence exogenous, conditional on observable control variables. We note that the issue of endogeneity due to self-selection of firms into government-guaranteed credit is limited by the fact that banks have the last say on the creditworthiness of the firm applying for credit, as banks effectively decide whether to grant a government-guaranteed loan to a firm during the credit underwriting process. In other words, and importantly for our identification strategy, the sole application for a government guarantee by a firm is not a sufficient condition to obtain it (i.e., self-selection into treatment). We explore the question of endogeneity further in Section 4.1.

Related to the time dimension of our empirical set-up, we note that the first quarter of the disbursement of government credit guarantees is 2020Q1 since before the outbreak of the pandemic the PGE was not in place. The before-after feature of the policy allows us to set up a difference-in-difference (D-i-D) identification strategy. More specifically, we compare the variation of the share of government-guaranteed credit and the share of far-right electoral support across postcode-municipalities in France, controlling for confounding factors. In a D-i-D, the main identifying assumption is that, in absence of treatment, the affected and non-affected postcode-municipalities would exhibit the same pre-treatment trend. Formally, our baseline specification takes the following form:

$$FarRight_i^e = \alpha + \beta GAR_i^e + \theta \Delta CRE_{i,e-18Q3} + \phi FarRight_i^{e-1} + \mathbf{X}_i\delta + \mathbf{Z}_d\gamma + \varepsilon_i \qquad (1)$$

$FarRight_i^e$ is the vote *share* for far-right candidates in postcode-municipality i in election e[17]. GAR_i^e is the share of government-guaranteed *new* loans in the sum of total *new* loans in a postcode-municipality $NCRE_i$. Both the numerator and the denominator are aggregated

[17]For instance, the 2022 *presidential* election, or 2022 *legislative* election. In the superscripts, these are represented by *22p* for the 2022 presidential election, *22l* for the 2022 legislative elections, and the rounds by *t1* and *t2*, respectively.

across N enterprises f incorporated within the same postcode-municipality from 2018Q3 until the quarter of the respective election e. Note that the first quarter of the disbursement of government credit guarantees is 2020Q1, before that date government credit guarantees were zero for all postcode-municipalities, formally:

$$GAR_i^e = \frac{\sum_{f,t}^{N,e} GAR_{i,f,t}}{\sum_{f,t} NCRE_{i,f,t}}$$

$\Delta CRE_{i,e-18Q3}$ is the *change* in postcode-municipality total credit aggregated across N enterprises f between pre- and post-pandemic periods; it controls for general credit demand and supply within a postcode-municipality, formally:

$$\Delta CRE_{i,e-18Q3} = \frac{\sum^N CRE_{i,f,e} - \sum^N CRE_{i,f,18Q3}}{\sum^N CRE_{i,f,18Q3}}$$

.

$FarRight_i^{e-1}$ is the vote share of far right candidates in the respective previous election in 2017. $\mathbf{X}_i$ is a vector of control variables at the postcode-municipality level i, namely: turnout, median standard of living, unemployment rate, population growth, the share of the population aged over 60, the share of young people between 15 and 29 years of age, the share of the female population, the share of immigrants, the share of the population with higher education, the share of the population with high school educational attainment, the share of the population with vocational education, the share of micro, small and large enterprises, the share of start-ups and the share of COVID-19 most affected industries. For more details, see Section 3.5 and Table 2.

$\mathbf{Z}_d$ is a vector of control variables at *department* level d controlling for the influence of the pandemic on voting behaviour and the economic impact, namely: the incidence rate, hospital intensive care occupancy rate, and total number of deaths from COVID-19, from the beginning of the pandemic to the date of the election. For summary statistics, see Table 3.

4.1 Endogeneity: reverse causality

Endogeneity concerns may arise from the influence of politics on the French banking system. Specifically, French banks might allocate more funds to areas with a higher risk of populism, even when accounting for economic and demographic conditions. If this is the case, it suggests that populist voting tendencies are driving credit allocation, rather than the other way around.

To examine the possibility of reverse causality, we employ the following specification:

$$GAR_i^e = \alpha + \beta FarRight_i^{e-1} + [\theta \Delta CRE_{i,e-18Q3}] + \mathbf{X}_i\delta + \mathbf{Z}_d\gamma + \varepsilon_i \quad (2)$$

where we regress the outcome of the previous election share of the far-right vote on government-guaranteed credit and overall credit. The results of this test are presented in Appendix A.

The evidence presented in Table A-1 indicates that credit allocation is independent of far-right voting patterns. In our analysis, the coefficient of the key variable, $FarRight_i^{22p,t2}$, consistently fails to reach statistical significance. This suggests that there is no meaningful relationship between the far-right vote share and subsequent credit allocation by French banks. The lack of significance implies that other factors, rather than political preferences, are likely driving credit allocation decisions. This finding is crucial for identification as it provides evidence against the hypothesis that banks might channel funds to areas with higher populist support in response to voting outcomes.

4.2 Limitations

Some caveats in our approach are worth mentioning. First, we are considering the sample of eligible and selected applicants (i.e., enterprises) for government-guaranteed loans, and we do not observe firms that applied for the government guarantee but were not deemed creditworthy by the bank despite the government guarantee. This may lead to some positive bias to our estimates in case credit rejections lead to increased support for populist parties or candidates between the 2017 and 2022 elections.

Second, selection bias by banks can limit the population representativeness of our sample. To some extent, the programme's eligibility rules assuage these concerns, but they do not exclude this possibility.

Third, unprecedented blank government guarantees for credit have been exceptional during the pandemic as a one-off event, as opposed to more continuous fiscal support over several years. A one-off fiscal support measure has the advantage of being unexpected, but it can very likely overestimate the impact of a more continuous government credit support measure of a more structural nature. In addition, from a technical standpoint, one consequence of this is that we perform a cross-sectional analysis after taking first differences between two elections, one in 2017 and one post-COVID-19 in 2022.

Fourth, we rely on France as a single-country study for the reasons mentioned previously. Although our data granularity allows us to be more confident about the underlying mechanism and strength of our results, this is obtained at the expense of the external validity of our findings. For instance, country-specific eligibility rules might also lead to a loss of external validity of our estimates when eligibility conditions change across countries or programmes. We are considering to expand our methodology to other euro area countries for future research.

5 Results

This section first presents our main results for all enterprises (Section 5.1) and then narrows the focus to microenterprises (Section 5.2). We explore employment protection as a potential mechanism for explaining the connection between government credit guarantees and electoral behaviour (Section 5.3). We present heterogeneity analysis using enterprises' turnover data (Section 5.4). Finally, We discuss the roles of incumbency (Section 5.5) and voter abstention (Section 5.6).

5.1 All firms

In the main empirical analysis, we present a number of models with different specifications for the first and second rounds of the 2022 presidential election held in April 2022, and using *newly* generated loans covered by the government guarantee as the main variable of interest.

Every specification is estimated using weighted ordinary least squares (OLS) estimators, with standard errors robust for heteroskedasticity, and the weights in each postal code i being the number of registered voters. Note that in the above described cross-section estimates idiosyncratic electoral factors such as the emergence of Emmanuel Macron as a unique, centrist, first-time candidate, is absorbed across all postcode-municipalities, this is similar to a time-invariant cross-section fixed effect in a panel setting. The main explanatory variable of interest is the share of post-COVID-19 government-guaranteed new loans GAR.

The results for the *first* round of the 2022 presidential election are reported in Table 5. Model (1) is the simplest, with only the share of government-guaranteed loans and the share of votes for far-right candidates in the previous 2017 election included in the model. The inclusion of previous election shares ensures that explanatory factors determining the (long-run) general level of support for far-right candidates in postcode-municipality are controlled for. For this reason,

the base model already has an R^2 value of 91.8%.[18]

Column (2) adds the post-COVID-19 change in average new loans to account for the extent of credit growth. In column (3) we employ the full suite of economic and demographic controls listed in Table 1 and described in Section 3.5 to control for confounding explanations not accounted for by the inclusion of previous election results or credit change. Model (4) adds COVID-19 controls at the department level. In all specifications, government credit guarantees are statistically significant and have negative coefficients.

We show the same specification this time for the *second* round of the 2022 presidential election in Table 6, this is our preferred model.[19] In this baseline specification, Column (4) shows a point estimate of -1.58. At the average – the *weighted* average of government-guaranteed loans over new loans across postcode-municipalities is 27.4% (see Table 1) – this implies that the government-guaranteed credit is estimated to have reduced far-right support by a semi-elasticity of 0.43 percentage points (0.274×-1.58).

The point-estimates are however likely to be non-linear, we run the same model with a quadratic form of government guaranteed credit as explanatory variable. Results are visually represented in Figure 5 where a top opened parabolic shape suggests that the impact of government guaranteed credit is decreasing up to approximately 23% of weighted average of government-guaranteed loans over new loans across postcode-municipalities, for then increasing and reaching a zero effect after approximately a 35% share of government guaranteed loans in new loans.

Based on the preferred *linear* estimate, guarantees led to approximately 138 thousand fewer votes for the far right (0.43% of 32.1 million valid votes in 2022). This average effect is estimated across *all* enterprises' sizes. These effects can also be seen to have dented a 6.1% of the seven percentage points increase in the weighted average far-right support in France from 2017 to 2022 (i.e., $0.43 \div 7$). In other words the increase of far-right would have been in average 7.43 percentage points. Similarly, a one standard deviation increase in the share of government-guaranteed credit would lead to a 3% reduction in the increase of far-right support.

The magnitude of linear effects are in line with existing literature investigating the impact of (negative) financial shocks on populist voting. Gyöngyösi and Verner (2022) find that a foreign currency debt shock explains three percentage points, or 20%, of the increase in the far-right vote

[18] We show a model without a previous election control in the appendix in Table E-1 and an accordingly lower R^2 value.

[19] Tables B-1 and B-2 in the appendix show the complete specification including control variables and their estimated coefficients.

share between 2006 and 2010 in Hungary. Doerr et al. (2022) estimate that the collapse of the German Datanatbank resulted in an increase of 2.9 percentage points, translating to 15%, in the Nazi party vote share in affected areas from 1930 to 1932. Given that we are not investigating extreme negative financial shocks, but a pandemic shock supported by a wide range of monetary and fiscal policy measures, the impact of government guarantees compares favourably.

5.2 Microenterprises

When considering the impact of financial and economic conditions on populist support, most of the existing literature has either considered broad-based economic factors that affect individuals' economic circumstances, such as unemployment, or financial and credit conditions that affect households' balance sheets, most notably foreign currency loans.

In this paper, we first focus on the link between the financing conditions of enterprises and the voting behaviour of individuals across enterprises' size distribution. As explained above, our working hypothesis is that the relationship between credit guarantees and voter behaviour should be stronger in smaller enterprises where employees-voters are personally invested and aware of the government support measures. In fact, the median microenterprise in our sample has one employee, see Table 4.

We test this hypothesis by running our main analysis on the sub-sample of microenterprises. To do this, we compute the credit variables as GAR_i^{22p} and $\Delta CRE_{i,22p-18Q3}$ to microfirms.

The results for the microenterprise sample are presented in Table 7, using the second round of the 2022 presidential election. The estimates indicate that most of the overall effect computed in Section 5.1 is driven by guarantees to microenterprises, with the reminder being explained by small enterprises. In Column (4), the point estimate is -3.176, while the average of government-guaranteed loans to microenterprises over the total of newly originated loans is 0.098% (see Table 1), implying that government-guaranteed credit to microenterprises has reduced far right support by a semi-elasticity of 0.31 percentage points (0.098 × -3.176). This effect represents approximately 73% of the overall negative impact (i.e. 0.43 percentage points) on the far right estimated in the previous Section 5.1.

Particularly instructive are the additional specifications presented in Table 8, which include averages of credit variables at postcode-municipality level across the four size categories of enterprises (see 3.4). The estimated coefficient for the share of government-guaranteed new loans to microenterprises, small, medium and large enterprises is decreasing in size, and the effect of

government guarantees is not significant for medium and large enterprises where the salience of granted government guarantee is negligible to employees.

5.3 Employment protection as a mechanism

This section explores the role of economic mechanisms through which credit guarantees can impact voting behaviour. For this, we employ the two-stage least square methodology (2SLS). We use changes in the assumed economic channel variable at postcode-municipality level (i.e., employment, change in number of enterprises) as the main outcome of the first-stage regression, and government-guaranteed credit as an exogenous regressor of interest. In the second stage, we the employ the fitted values of the first stage to test the transmission link to voting behaviour.

While the OLS estimator of Sections 5.1 and 5.2 captures the so-called "reduced form", or the direct effect of government guaranteed credit on far right electoral outcomes, the 2SLS estimator captures this effect arising through the hypothesised economic channel. A caveat is due before proceeding: while from an economic standpoint the 2SLS is useful in identifying transmission channels, 2SLS is not as efficient as OLS, especially with weak instruments, and generally can have biased coefficients. The bias can be large in the case of weak instruments.

We investigated several economic mechanisms that could explain the relationship, among the most relevant we test the employment channel, the firm survival measured as the change in number of enterprises and changes in turnover.footnoteAll these mechanisms are tested at postcode-municipality level using enterprise census data from the French statistical office (Insee, 2023a). We find that change in employment is the most relevant transmission channel, which, through government-guaranteed credit, led to a decrease in support for the far right.

Formally, we specify a first-stage regression:

$$\Delta Employment_{i,20-18} = \alpha + \beta^{FS} GAR_i^e + \beta CRE_{i,e-18Q3} + \beta FarRight_i^{e-1} + \mathbf{X}_i\delta + \mathbf{Z}_d\gamma + \varepsilon_i \quad (3)$$

where $\Delta Employment_{i,20-18}$ is the change in employment in each postcode-municipality i between 2020 and 2018.[20] In the second stage, we use the predicted changes in employment ($\Delta \widehat{Employment}_{i,20-18}$) to specify a model with the far right share $FarRight_i^e$ as the dependent

[20]The census data are annual data with the latest observation available in 2020, unfortunately we do not observe the change in employment for later years. This is unlikely to have an influence on the results, as most government-guaranteed credit for *new* loans was disbursed in 2020 (shown in Figure 1), suggesting that most of the effects on employment presumably occur in this year.

variable:

$$FarRight_i^e = \alpha + \beta^{2SLS}\widehat{\Delta Employment}_{i,20-18} + \beta CRE_i + \beta FarRight_i^{e-1} + \mathbf{X}_i\delta + \mathbf{Z}_d\gamma + \varepsilon_i \quad (4)$$

We present the results of this specification for across enterprise sizes. This time however, medium and large enterprises are grouped together since the economic variables do not have a more granular breakdown for those firms due to the categorisation choices within the French statistical office census data, (Insee, 2023a). We also make the assumption that self-employed individuals are part of the microenterprise set. The results are shown in Tables 9 and 10, respectively.

Column (1) in Table 9 shows that credit guarantees are positively related to changes in employment in 2020, helping to retain employment. However, columns (2) to (4) show that this positive and statistically significant relationship only holds for credit guarantees and employment changes in microenterprises.[21]

In turn, in column (1), Table 10, predicted changes in employment negatively and significantly explain the share of far-right votes, i.e. employment protection reduces the support for far-right candidates. Consistent with the above findings, this only holds for employment changes in microenterprises. The magnitude of the effect for are in line with the OLS model of Table 6.

For the 2SLS specifications, two tests for the relevance and strength of the instrument are reported: the Kleibergen and Paap (2006) test under the null hypothesis of irrelevant instruments and the Anderson and Rubin (1949) weak instrument test. Note that, rejection of under-identification does not rule out weak identification, and the F-stat is usually more informative in addressing weak identification concerns than the irrelevance test, with the rule-of-thumb F-statistics value for the rejection of the weak instrument F-stat > 10. In our case, the F-statistic of joint significance of all instruments reduces to test the weakness of our single instrument: government guarantees.[22]

[21] For robustness, we also run the same analysis for the change in employment between 2019 and 2020, results are similar and are available from the authors.

[22] For the case of a single endogenous regressor and a single instrument, we follow the approach suggested by Andrews and Stock (2018), where the authors recommend that researchers judge the instrument in the case of only a single instrument by using the identification-robust Anderson and Rubin (1949) test. This method is efficient regardless of the strength of the instruments.

5.4 Heterogeneity: economic resilience and pre-existing economic conditions

In addition to enterprise demographics, such as enterprise size, and economic transmission channels, such as employment, other economic characteristics might be associated with variation in far-right voting. In general, we would expect that in richer, wealthier and economically more resilient places, the effect of government guarantees on support for the far right would be lower. To investigate this, we propose a two-fold strategy.

First, we look at economic resilience during the COVID-19 recession by using turnover data at enterprise-level from Anacredit. For each enterprise in the credit registry, we compute the change of turnover for the period 2020Q4-2019Q4 and aggregate across postcode-municipalities.[23] A binary variable is indexed one if the percentage change in turnover in a specific municipality-postcode is above the median (=1). The specification of interest interacts the turnover dummy with the share of government-guaranteed credit.

The results of this analysis are reported in Table C-1 in the appendix. The marginal effects of government-guaranteed credit remain similar to the baseline. The interaction term $\text{TURNOVER}_i^{20Q4-19Q4} > p.5 \times \text{GAR}_i^{22p}$ is not significant in the full sample in column (1) in Table C-1. However, the effect magnitude and significance of government-guaranteed credit GAR_i^{22p} are in line with Table 8 for all enterprise sizes. However, the estimation for microenterprises in column (2) shows that in postcode-municipalities where the average turnover change is above median, the marginal effect of government-guaranteed credit on the reduction of the far-right share is halved.

Postcode-municipalities with a higher turnover change during the pandemic period are less affected by the COVID-19 recession, and hence exhibit support for populist candidates conditional on government-guaranteed credit. This is in line with the microenterprise survival effect found in Section 5.3 Table 10 on employment protection. In other words, in places where microenterprises required more government support, the reduction in political support for the far right was higher.

Second, we investigate more general structural economic conditions by using the postcode-municipality unemployment rate from the French 2019 census data (Insee, 2023b). We create a binary variable indexed one if the unemployment rate in a specific postcode-municipality is below the median (=1) as an indicator of good structural economic conditions. The specification

[23] In a separate set of regression we run a robustness on different dates, e.g., 2021Q4 and 2022Q2, and obtain similar results.

of interest interacts the unemployment rate dummy with the share of government-guaranteed credit.

Table C-2 in the appendix displays the results. The marginal effects of government-guaranteed credit remain consistent with the baseline specification. The interaction term for the unemployment rate is not significant in the full sample, as shown in column (1), but the coefficients for government-guaranteed credit are comparable in both magnitude and significance to those in Table 8 for all enterprise sizes. Consistent with previous findings, column (2) of Table C-2 indicates that for microenterprises in postcode-municipalities with below-median unemployment rates, the marginal effect of government-guaranteed credit on the reduction of the far-right share is reduced by half. Additionally, the interaction terms for small and larger enterprises remain insignificant, consistent with previous results.

In summary, the evidence supports our results shown in Table 8, where we provided distinct estimates according to enterprise size. This suggests that government-guaranteed credit plays a more significant role in microenterprises with a closer owner-employee relationship. Additionally, the extent of the cushioning effect on the far right diminishes when microenterprises are located in regions with higher resilience to the COVID-19 recession and lower structural unemployment rates. In those postcode-municipalities, the political impact of subsidised government credit is therefore weakened.

5.5 A far-right phenomenon?

In this Section we focus on the first round of presidential election to investigate whether, in a setting with more political groupings, the incumbent or the left were beneficiaries or not of government guaranteed credit.

During an emergency, a well-managed lending program can indirectly contribute to the re-election of the incumbent government. This occurs because firms that receive government-backed credit often see their financial and economic conditions improve, thereby increasing the chances of the incumbent party or candidate's re-election. Although these government guarantees were not implemented with the intention of providing a political advantage—rather. i.e. "self-selected", they were designed to address the cash shortages caused by the pandemic—they may have nevertheless benefited the incumbent. This outcome is evident from the second round of presidential elections, where only two parties were in contention, as discussed in Section 5.1.

Similarly, expansionary fiscal support measures that increase public spending are generally

associated with left-leaning economic policies, aligning more closely with the preferences of far-left voters. Observing the success of the government-guarantee program in France, it is possible that the far-left electorate gained support as moderate centre-left voters, particularly employees, shifted their allegiance towards the far-left, favouring even more extensive government subsidy programs.

To test these hypotheses, we run the baseline model with the dependent variable being the share of cast votes for the main political groupings (i.e. far left, centre left, incumbent, centre right without Macron and far right, for details on these classifications, see Section 3.2). We report the results for the first round of the presidential election and all firms in Table 11.

The findings indicate that both the incumbent party and the far-left benefited from the fiscal support measure during the first round of the presidential election. The positive and statistically significant impact is comparable in magnitude to the decline in votes for the centre-right and far-right, who were disadvantaged by this policy. These results support the theory that the incumbent gained from the measure and that expansionary government policies tend to resonate more with left-leaning voters.

Table 12 shows the same results for the subset of microenterprises. While the general direction of the effect is similar to the previous result for all firms, the impact for the incumbent is significantly different (83.3% higher) than in Table 11. This confirms that the predominance of the effect of government guarantees is driven by microenterprises where the relationship between reception of government guaranteed credit and political outcomes is more salient. Appendix H, shows the results for small, medium and large firms. The impact on the far right is decreasing in size also in the first round, corroborating the evidence from the second round elections.

5.6 Voter abstention

Voter abstention, an increasingly prevalent issue in many democratic elections, could pose a threat to our estimates, despite our use of turnout as a control variable in all specifications. This concern arises because subsidised credit might decrease support for populist parties by motivating centrist voters to participate in elections. To address this issue, we examine the *change* in voter turnout between the 2022 and 2017 presidential elections as our dependent variable. Additionally, we conduct further analysis to determine whether government-guaranteed credit affects far-right support across different *levels* of turnout.

Table D-1 in the appendix presents the results of the specification examining the change in

turnout between the 2022 and 2017 presidential elections as the dependent variable. Although the direction of the point estimates suggests a potential relationship between government-guaranteed credit and turnout, this relationship is not statistically significant. These findings indicate that there is no significant link between subsidised credit and the probability of voting.

We conduct a second test to examine the relationship between government-guaranteed credit and far-right support across turnout changes at postcode-municipalities level. To perform this analysis, we create a dummy variable indicating postcode-municipalities with turnout rates changes higher than the median (=1) and interact it with our main variable of interest, GAR_i^{22p}. The results, presented in Table D-2, continue to show a positive effect of guarantees on the reduction of support for the far right. The interaction of turnout rates and guarantees has a negative and significant effect (-0.832) with a standard error of 0.459. This finding suggests that the dampening effect of government-subsidised credit on far-right support is stronger in areas with higher turnout rates changes. In these areas, the marginal effect of government guarantees on far-right voting is more negative than in our baseline in Table 6. Specifically in column (4) of Table D-2 we estimate a marginal effect of -1.837 ($-1.005 - 0.832$), which is significant at a 1% confidence level with delta method standard errors of 0.328.

6 Robustness checks

In this section, we discuss a number of robustness checks that are presented in the paper's appendix.

6.1 Average treatment effect and non-linearities

The first set of tests tests a range of issues, with results shown in Table E-1 in the appendix: Column (1) shows the baseline specification with a binary treatment dummy, one being postcode-municipalities where the share of government guarantees in total lending was not equal to zero. In the sample 5131 postcode-municipalities have at least one guaranteed loan, in other words 93.3%. Results are in line with the baseline in Table 6. The interpretation is, however, different since the dummy captures the average difference in "treated" versus "control" postcode-municipalities, while the shares allows for a more precise, due to the unbalanced share of treated postcode-municipalities, and proportional interpretation. Column (1) of Table E-1 suggests that "treated" postcode-municipalities show a lower share of far-right voting in the second round of the 2022

presidential election by 0.898 percentage points with respect to "control" postcode-municipalities. This is of course upward biased with respect to the baseline estimate of 0.43 percentage points in far-right decrease in Table 6.

Column (2) of Table E-1 looks at non-linear effects of government credit guarantees by performing a specification with the squared government-guaranteed credit. The results confirm the intuition of Figure 3, where the negative effect of government-guaranteed credit on far-right support tends to fade away as the share of guaranteed loans increases.

Column (4) illustrates a robustness test estimated with equation 5 where the dependent variable is $\Delta FarRight_{i,e-e_{t-1}}$, i.e., the *change* in the vote share for far-right candidates in postcode-municipality i versus the last election (e_{t-1}). Formally:

$$\Delta FarRight_{i,e-e_{t-1}} = \alpha + \beta GAR_i^e + \theta \Delta CRE_{i,e-18Q3} + \mathbf{X}_i\delta + \mathbf{Z}_d\gamma + \varepsilon_i \tag{5}$$

This effectively moves the previous election result to the left-hand side of the equation, mechanically imposing a coefficient of one, at the cost of losing an estimator for the predictive power of the previous election results, which is nevertheless very close to one as shown in Table 6. As shown in column (4), this specification yields similar results to the baseline.

6.2 Outliers and weighting

In order to test the robustness of the main results to more technical aspects, Table F-1 in the appendix presents a range of robustness checks of the model specification (treatment of outliers and weighting), with the results corroborating the stability of the findings.

Columns (1) and (2) present the results by adopting a different treatment of outliers of our credit variables, using a non-winsorised sample and a sample winsorised at the 95% level. Column (3) of Table F-1 presents the estimates for the unweighted OLS specification showing remarkably stable results. A further adjustment to this is shown in column (4), where Paris is excluded from the model due to its disproportionate size. In the main results in Section 5 we use the number of registered voters as weights for the OLS estimation and hence Paris is assigned a disproportionate weight with respect to other postcode-municipalities and might drive the results. Yet, estimates are stable as and do not lead to this conclusion.

Overall, we conclude that this battery of robustness checks does not alter our inference and is in line with the main conclusions presented in Section 5.

6.3 Fractional response Model

In this section, we look into assessing the robustness of our point estimates by employing a non-linear model for the dependent variable. Given that our primary variable of interest is a share, which is a continuous variable bound within the unit interval [0, 1], we need an appropriate modelling approach. Thus, in the following analysis, we utilise the fractional response model (FRM) which is particularly suitable for our data characteristics and allows us to validate the baseline results obtained from the simpler linear probability model (Papke & Wooldridge, 1996). In doing so, our objective is to ensure the reliability and accuracy of our findings, taking into account the bounded nature of our dependent variable.

In Table G-1, we present the results for our baseline second round presidential election model using a fractional logit response specification. Column (4) of Table G-1 shows an average marginal effect of -1.23. This is slightly smaller than in the baseline (-1.58) of Table 6 but confirms the sign and statistical significance at the 1% confidence level. Similar results are obtained with the fractional response logit model, the average marginal effect with FRM probit is -1.35, results available from the authors.

In the same way, the average effects and significance in the FRM specification of the main control variables, the share of the far right in the second round of the 2017 presidential election and the change in overall credit at the postcode-municipality level are in line with the baseline specification of Table 6.

7 Conclusions

This study examined the link between a fiscal stimulus measure aimed at supporting credit supply and access to credit during the COVID-19 pandemic and political preferences in France. The theoretical intuition behind the study is that financial support policy that tangibly supports micro and small firms in particular, could lower voters' political preferences for extreme candidates. The empirical evidence shows that the government guaranteed credit fiscal support measure has diverted support away from the far right in favour of the incumbent in the second stage of the french presidential elections. We find also evidence that, in the first stage, the extreme left benefited from such policies despite usually being identified with extreme voting behaviour. This suggests that government support policies are perceived by voters as more left leaning policies by the electorate rather than social policies stemming from the right side of the political spectrum.

The effect are driven by microenterprises, where the median number of employees is one, and the information on the receipt of a government-guaranteed credit is more tangible to the electorate, either as owners, employees, or family members. The evidence is highly statistically significant and robust to alternative specification for microenterprises, while the magnitude and significance decrease with firm size.

The paper has shown that the main economic channel relates to employment protection: localities that had a positive effect on changes in employment through the disbursement of guarantees exhibit the strongest decrease in support for the far right. At the same time, cross-sectional evidence indicates that the effect on the reduction of far-right support is inversely proportional to local economic conditions: places with an above-median change in firm turnover during the pandemic period experience a lower impact of government guarantees on the reduction of far-right votes.

Overall, The findings provide a novel contribution to the literature on finance and populism: by mapping granular credit and voting data, it shows that financial conditions have tangible impact on electoral outcomes in the context of exogenous credit shocks. The evidence suggests that government-guaranteed credit is effective in affecting voting behaviour when employment levels are maintained *and* in areas most economically affected by the COVID-19 shock.

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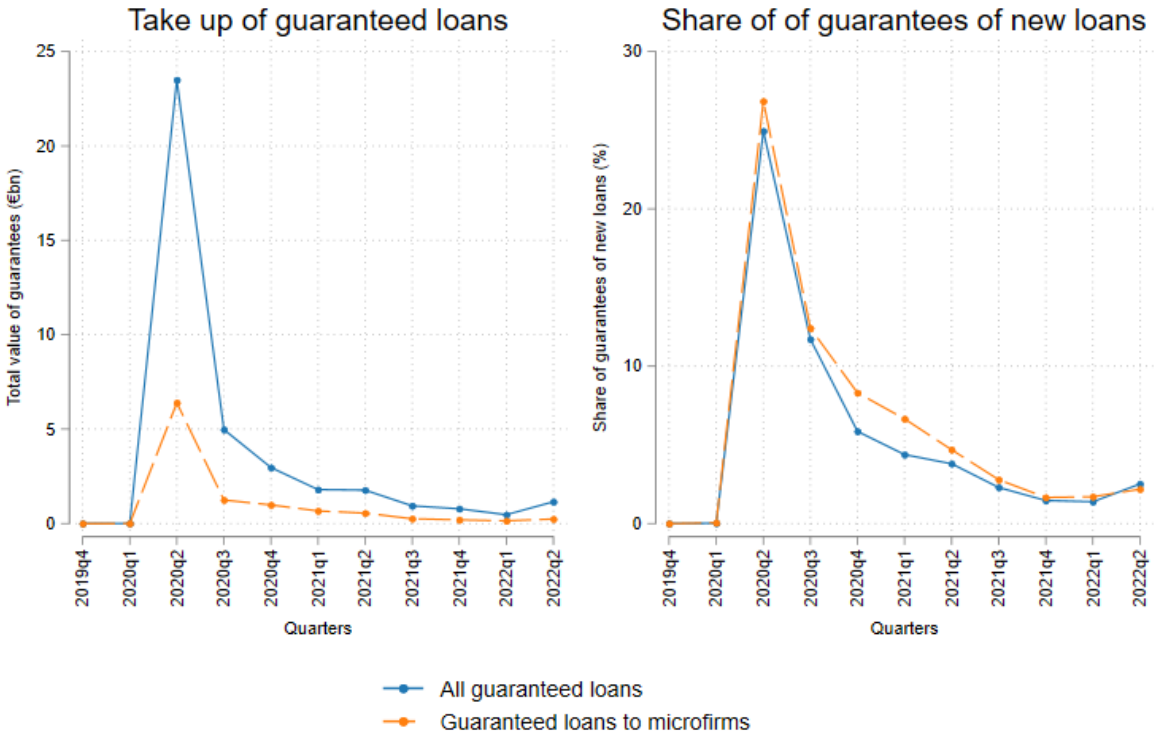
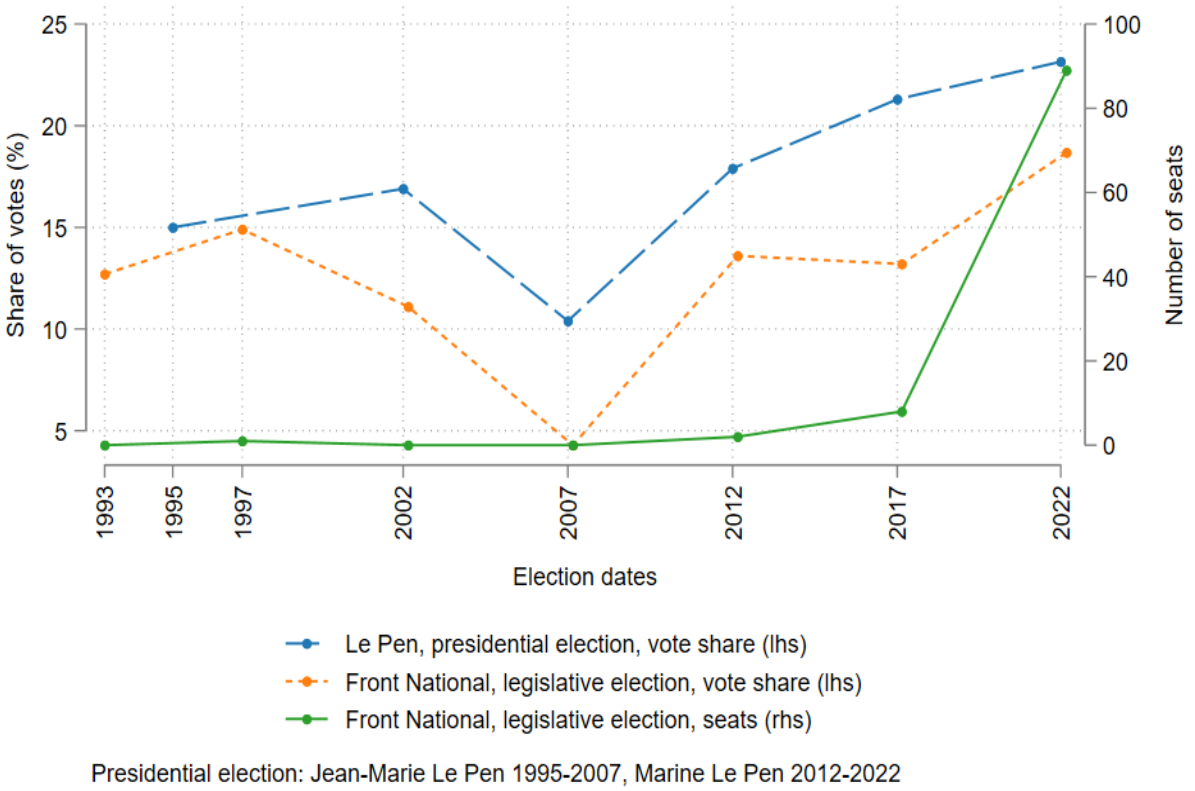
Figure 1: Government-guaranteed loans, March 2020-December 2022



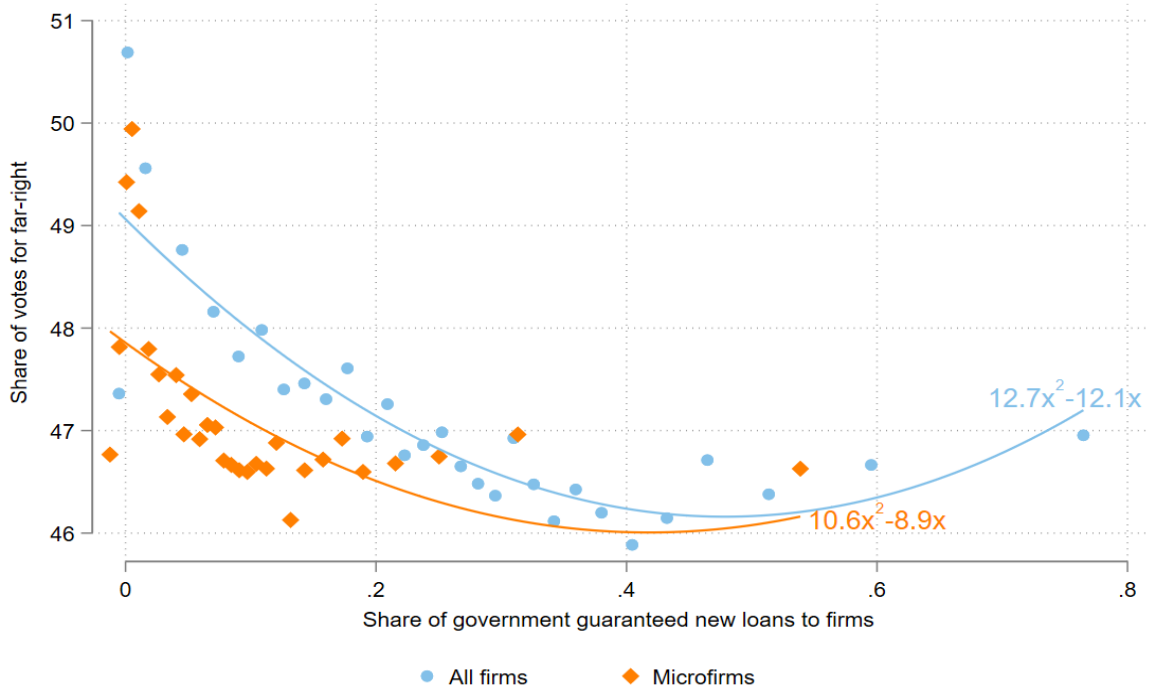
Note: the LHS of the figure shows the time evolution of the *value* of government-guaranteed credit in total credit for all firms and for microfirms. The RHS shows the *share* of government-guaranteed credit in total credit for all firms and for microfirms. Note that the share for microfirms is computed over the total amount of loans for those firms. Source: Anacredit, euro are credit registry data.

Figure 2: RN first round presidential and legislative election results, 1993-2022



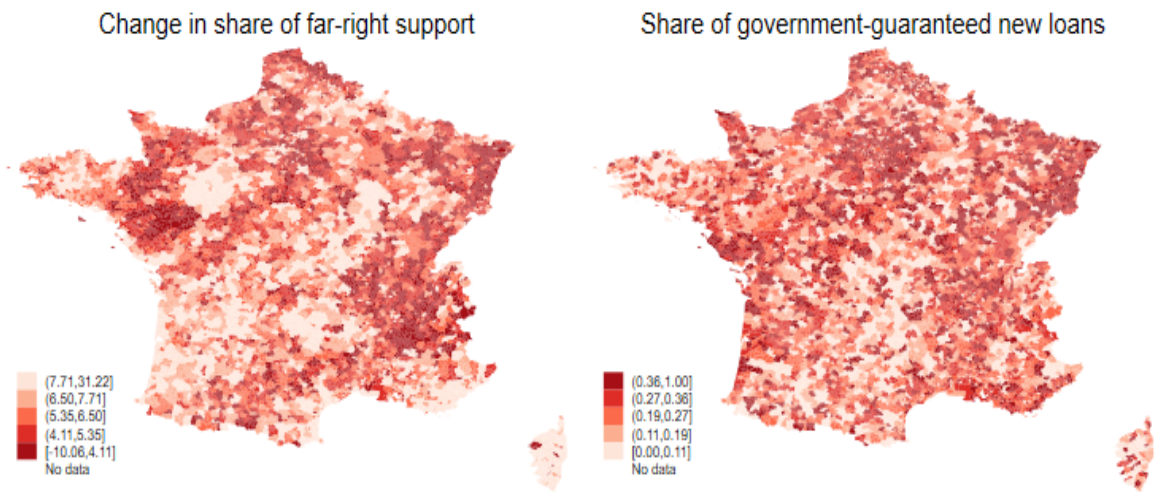
Note: The chart shows the evolution of the political preference of the French electorate for the Rassemblement National. The core of our empirical analysis is covering the 2017-2022 period. Data are from Faucher and Garcia (2017) and the Ministry of the Interior (2022b)

Figure 3: Government-guaranteed credit and far-right voting



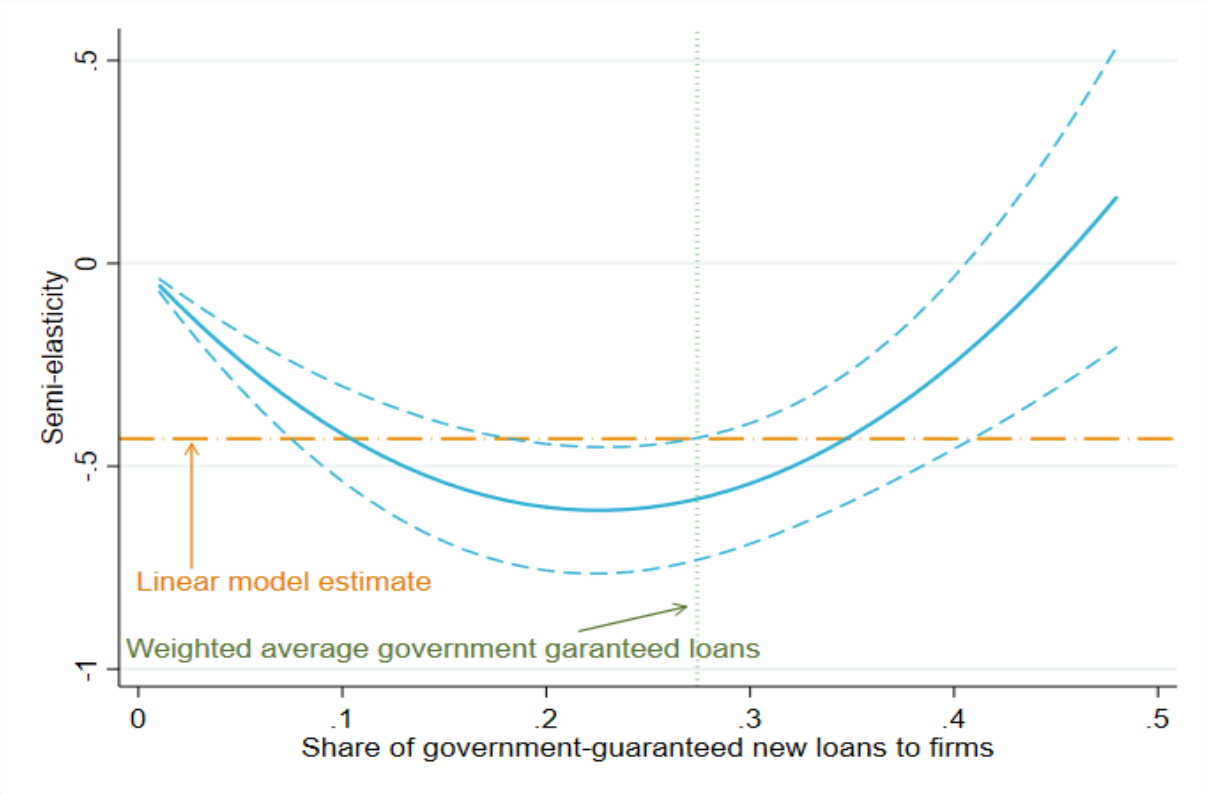
Note: The chart shows binned scatter plots between the share of government-guaranteed credit and the share of votes for the far-right in the second round of the 2022 presidential election for all and microenterprises. The regression controls for previous presidential election first round results. Credit guarantees are grouped into 30 equally-sized bins, N=5601

Figure 4: Map view: cross-sectional variation far-right and government guarantees



Note: The chart shows visual maps of France municipalities with the *change* in the share of votes for far-right candidates in the first round of the 2022 presidential election - the lower the change the higher the colour intensity (rhs); and the municipality-level aggregate share of government-guaranteed credit in total credit from March 2020 until 2022 presidential elections - the higher the guaranteed credit share the higher the colour intensity. Map data from Admin SIG (2023).

Figure 5: Non-linear estimates: presidential, Round 2



Note: The chart shows the baseline estimate of Table 6 in a non-linear specification with the squared government guaranteed credit variable $(GAR_i^{22p})^2$ added as an explanatory variable. The solid blue line is the estimated semi-elasticity in the non-linear model, with dashed blue confidence intervals at 95%. The dashed orange line shows the average semi-elasticity (-0.43) implied by the baseline estimate of Table 6 and estimated at the weighted average of the share of government guaranteed new loans (dotted vertical green line) across postcode-municipalities with weights being the number of registered voters in each postcode-municipality respectively. The full specification of this regression is shown in Column 2 of Table E-1.

Table 1: Summary Statistics: Main electoral and credit variables

	Mean	Median	Std.dev.	Min.	Max.	N
Election outcomes:						
Far-right share$_i^{22p,t1}$	32.703	33.086	10.105	10.974	62.105	5601
Far-right share$_i^{22p,t2}$	41.307	42.183	12.841	14.643	78.049	5602
Incumbent share$_i^{22p,t1}$	27.625	27.134	5.899	10.000	55.783	5601
Incumbent share$_i^{22p,t2}$	58.693	57.817	12.841	21.951	85.357	5602
Far-left share$_i^{22p,t1}$	25.391	23.440	8.774	5.422	68.356	5601
Centre-right share$_i^{22p,t1}$	35.570	35.359	6.967	14.481	68.795	5601
Centre-left share$_i^{22p,t1}$	6.336	5.996	2.140	0.526	14.529	5601
Credit variables:						
GAR$_i^{22p}$	0.274	0.262	0.132	0.000	0.852	5594
Guarantees$_i^{22p}$ to large enterprises	0.019	0.004	0.049	0.000	1.000	5594
Guarantees$_i^{22p}$ to medium enterprises	0.050	0.026	0.076	0.000	1.000	5594
Guarantees$_i^{22p}$ to small enterprises	0.097	0.081	0.085	0.000	1.000	5594
Guarantees$_i^{22p}$ to microenterprises	0.098	0.084	0.076	0.000	1.000	5594
ΔCRE $_i^{22p-18Q3}$	1.141	1.016	0.687	-0.086	5.038	5594
ΔCRE $_i^{22p-18Q3}$ to microenterprises	52.140	23.540	105.508	1.764	1003.493	4671
Employment outcome variables:						
Δ*Employment* $_i^{2019-2020}$	0.943	1.066	2.590	-60.349	92.583	5602
Δ*Employment* in microenterprises $_i^{2019-2020}$	0.931	0.921	5.088	-83.333	200.000	5602
Δ*Employment* in small enterprise $_i^{2019-2020}$	-0.489	-0.868	10.692	-100.000	237.500	5592
Δ*Employment* in medium and large enterprises $_i^{2019-2020}$	-0.251	-0.377	13.408	-100.000	303.604	5540

Note: The table shows the descriptive statistics of the electoral and credit variables employed in the analysis. Observations are weighted by the number of registered voters in 2022. The subscript i refers to the postcode-municipality unit of observation. The superscript *22p* denotes data for the 2022 presidential elections, while *t1* and *t2* denote first and second electoral round respectively. For details on the computation of variables refer to Sections 3.2 and 3.3. All credit variables are winsorised at 99% level.

Table 2: Summary Statistics: Control variables at postcode level

	Mean	Median	Std.dev.	Min.	Max.	N
$\text{Turnout}_i^{22p,t1}$	0.745	0.752	0.044	0.000	0.863	5602
Median standard of living $(\log)_{i,2019}$	10.006	9.984	0.145	9.544	10.740	5580
$\text{Unemployment rate}_{i,2019}$	12.829	11.984	4.276	0.000	37.416	5602
$\text{Population growth}_{i,2019-1999}$	13.631	10.923	17.624	-39.394	252.165	5602
$\text{Old share}_{i,2019}$	26.905	26.069	6.732	9.362	68.708	5602
$\text{Young share}_{i,2019}$	16.918	15.700	4.798	0.000	45.086	5602
$\text{Share of female population}_{i,2019}$	51.580	51.513	1.276	27.403	58.427	5602
$\text{Share of immigrants}_{i,2019}$	8.839	6.755	7.066	0.000	45.980	5602
$\text{Higher education share}_{i,2019}$	30.764	27.815	12.071	8.789	74.105	5602
$\text{High school share}_{i,2019}$	17.253	17.324	1.921	8.333	44.355	5602
$\text{Vocational share}_{i,2019}$	25.201	26.608	6.592	5.056	41.737	5602
$\text{Share of microfirms}_{i,2019}$	82.163	82.216	5.578	38.889	100.000	5602
$\text{Share of small firms}_{i,2019}$	14.263	14.308	4.201	0.000	50.000	5602
$\text{Share of large firms}_{i,2019}$	3.575	3.429	1.860	0.000	26.667	5602
$\text{Share of startups}_{i,2019}$	36.495	33.333	16.217	0.000	125.000	5602
$\text{Covid-impacted industries}_{i,2017-2019}$	0.102	0.083	0.081	0.000	1.000	5600

Note: The table shows the descriptive statistics of the control variables variables employed at postcode level in the analysis. The subscript i refers to the postcode-municipality unit of observation. The superscript *22p* denotes data for the 2022 presidential elections, while *t1* and *t2* denote first and second electoral round respectively. For details on the variables refer to Section 3.5.

Table 3: Summary Statistics: Control variables at department level

	Mean	Median	Std.dev.	Min.	Max.	N
Hospital occupancy rate$_d$	40.897	42.517	8.653	27.859	53.167	94
COVID-19 deaths per capita$_d$	0.192	0.193	0.066	0.079	0.667	94
COVID-19 incidence rate$_d$	407.584	407.174	34.491	336.369	490.177	94

Note: The table shows the descriptive statistics of control variables employed at the department level in the analysis. The subscript d refers to the postcode-municipality unit of observation. For details on the variables refer to Section 3.5.

Table 4: Summary Statistics Firm-level

	Firm Size			
	Large	Medium	Small	Micro
	Mean/Median	Mean/Median	Mean/Median	Mean/Median
Panel A: All firms				
Number of employees	551.2 7	74.2 36	21.1 13	14.6 1
Annual balance sheet (€ mln.)	222.480 0.786	23.059 2.358	20.773 1.132	1.656 0.255
Annual turnover (€ mln.)	44.995 0.915	8.549 2.933	2.953 1.581	0.571 0.239
Probability of default	0.082 0.027	0.094 0.024	0.095 0.023	0.113 0.041
Number of firms	21'667	45'462	143'260	673'147
Panel B: Firms with new loans				
Number of employees	689.2 6	78.8 49.5	21.5 15	12.5 1
Annual balance sheet (€ mln.)	306.781 0.523	15.276 2.182	28.091 0.926	0.954 0.258
Annual turnover (€ mln.)	51.744 0.641	8.755 2.830	2.697 1.373	0.726 0.267
Probability of default	0.074 0.023	0.066 0.019	0.069 0.018	0.103 0.033
Number of firms	7'319	20'698	87'912	384'215

Note: The table shows the descriptive statistics by firm size from the sample firms that are in the Anacredit registry. *Panel A* shows the full sample of firms including those that are in the credit registry because of committed borrowing prior to 2018Q3, *Panel B* shows the statistics for firms that obtained a new loan after 2018Q3. Values are averages across time from 2018Q3 until 2022Q2. In each item line, the first row shows the mean while the second shows the median.

Table 5: Main results 2022 presidential election, Round 1

Dep.var.: FarRight$_i^{22p,t1}$	(1) Only Guarantees	(2) + Credit Change	(3) + Econ & Demographic Controls	(4) + Covid Controls
GAR$_i^{22p}$	-2.585	-2.253	-1.131	-0.953
	(0.410)***	(0.412)***	(0.286)***	(0.279)***
Far-right share$_i^{17p,t1}$	1.004	1.005	1.023	1.020
	(0.013)***	(0.012)***	(0.010)***	(0.014)***
Δ CRE$_i^{22p-18Q3}$		-0.350	-0.151	-0.196
		(0.106)***	(0.060)**	(0.059)***
Demographic Controls	No	No	Yes	Yes
Economic Controls	No	No	Yes	Yes
Covid Controls	No	No	No	Yes
Observations	5593	5589	5573	5498
R^2	0.917	0.918	0.956	0.958

Note: ***: 0.01, **: 0.05, *: 0.1. Standard errors in parentheses robust for heteroscedasticity. GAR$_i^{22p}$ is the share of government guaranteed new credit over total new credit in postcode-municipality i. Every specification is estimated using weighted OLS estimators, with the weights in each postcode-municipality i being the number of registered voters.

Table 6: Main results 2022 presidential election, Round 2

Dep.var.: FarRight$_i^{22p,t2}$	(1) Only Guarantees	(2) + Credit Change	(3) + Econ & Demographic Controls	(4) + Covid Controls
GAR_i^{22p}	-3.392	-2.843	-1.689	-1.577
	(0.348)***	(0.332)***	(0.244)***	(0.244)***
FarRight$_i^{17p,t1}$	1.004	1.003	0.896	0.915
	(0.012)***	(0.013)***	(0.006)***	(0.007)***
$\Delta CRE_{i,22p-18Q3}$		-0.571	-0.426	-0.407
		(0.080)***	(0.055)***	(0.055)***
Demographic Controls	No	No	Yes	Yes
Economic Controls	No	No	Yes	Yes
Covid Controls	No	No	No	Yes
Observations	5594	5590	5574	5498
R^2	0.955	0.956	0.975	0.976

Note: ***: 0.01, **: 0.05, *: 0.1. Standard errors in parentheses robust for heteroscedasticity. Credit guarantees$_i^{22p}$ is the share of government guaranteed new credit over total new credit in postcode-municipality i. Every specification is estimated using weighted OLS estimators, with the weights in each postal code i being the number of registered voters.

Table 7: Main results for microenterprises, 2022 presidential election, Round 2

Dep.var.: $\text{FarRight}_i^{22p,t2}$	(1) Only Guarantees	(2) + Credit Change	(3) + Econ & Demographic Controls	(4) + Covid Controls
GAR_i^{22p} to microenterprises	-2.463	-2.717	-3.478	-3.176
	(0.565)***	(0.660)***	(0.470)***	(0.470)***
Δ $\text{CRE}_{i,22p-18Q3}$ to microenterprises		0.000	-0.001	-0.001
		(0.000)	(0.000)***	(0.000)***
$\text{FarRight}_i^{17p,t2}$	1.004	1.006	0.893	0.916
	(0.012)***	(0.012)***	(0.006)***	(0.007)***
Demographic Controls	No	No	Yes	Yes
Economic Controls	No	No	Yes	Yes
Covid Controls	No	No	No	Yes
Observations	5594	4670	4665	4621
R^2	0.954	0.955	0.976	0.976

Note: ***: 0.01, **: 0.05, *: 0.1. Standard errors in parentheses robust for heteroscedasticity. Every specification is estimated using weighted OLS estimators, with the weights in each postcode-municipality i being the number of registered voters.

Table 8: Separate results for firms by size, 2022 presidential election, Round 2

Dep.var.: $\text{FarRight}_i^{22p,t2}$	(1) Microenterprises	(2) Small enterprises	(3) Medium enterprises	(4) Large enterprises	(5) Full sample
GAR_i^{22p} to microenterprises	-3.176				-3.631
	(0.470)***				(0.814)***
GAR_i^{22p} to small enterprises		-1.679			-1.723
		(0.364)***			(0.773)**
GAR_i^{22p} to medium enterprises			-0.463		-1.349
			(0.496)		(0.873)
GAR_i^{22p} to large enterprises				0.276	-0.646
				(0.665)	(0.684)
$\text{FarRight}_i^{17p,t2}$	0.916	0.916	0.921	0.923	0.922
	(0.007)***	(0.007)***	(0.008)***	(0.011)***	(0.011)***
Demographic Controls	Yes	Yes	Yes	Yes	Yes
Economic Controls	Yes	Yes	Yes	Yes	Yes
Covid Controls	Yes	Yes	Yes	Yes	Yes
Observations	4621	5016	3812	1549	1549
R^2	0.976	0.976	0.978	0.982	0.983

Note: ***: 0.01, **: 0.05, *: 0.1. Standard errors in parentheses robust for heteroscedasticity. Every specification is estimated using weighted OLS estimators, with the weights in each postcode-municipality i being the number of registered voters. Note that in Column (5) the number of observations decreases substantially since this specification is restricted, by construction, to postcode-municipalities that have at least one firm for each size within its borders.

Table 9: 2SLS results by firm size: First stage, 2022 presidential election, Round 2

Dep.var.: $\Delta Employment_{i,20-18}$	(1) Full sample	(2) Microenterprises	(3) Small enterprises	(4) Medium and large enterprises
GAR_i^{22p}	1.009			
	(0.287)***			
GAR_i^{22p} to microenterprises		1.806		
		(0.757)**		
GAR_i^{22p} to small enterprises			1.236	
			(0.940)	
GAR_i^{22p} to medium and large enterprises				-0.540
				(1.077)
Demographic Controls	Yes	Yes	Yes	Yes
Economic Controls	Yes	Yes	Yes	Yes
Covid Controls	Yes	Yes	Yes	Yes
Observations	5498	4619	4644	2957
Irrelevant instr. (p-val)	0.000	0.017	0.188	0.615
Weak instr. (F-stat)	41.6	62.0	37.6	10.5

Note: ***: 0.01, **: 0.05, *: 0.1. Standard errors in parentheses robust for heteroscedasticity. GAR_i^{22p} is the share of government guaranteed new credit over total new credit in postcode-municipality i. Every specification is estimated using weighted 2SLS estimators, with the weights in each postal code i being the number of registered voters. Two tests for the relevance and strength of the instrument are reported: the Kleibergen and Paap (2006) test under the null hypothesis of irrelevant instruments, and the Anderson and Rubin (1949) weak instrument test.

Table 10: 2SLS results by firm size: Second stage, 2022 presidential election, Round 2

Dep.var.: $\text{FarRight}_i^{22p,t2}$	(1) Full sample	(2) Microenterprises	(3) Small enterprises	(4) Medium and large enterprises
$\Delta \widehat{Employment}_{i,20-18}$	-1.563			
	(0.476)***			
$\Delta \widehat{Employment}_{i,20-18}$ to microenterprises		-1.177		
		(0.499)**		
$\Delta \widehat{Employment}_{i,20-18}$ to small enterprises			-0.764	
			(0.593)	
$\Delta \widehat{Employment}_{i,20-18}$ to medium and large enterprises				0.955
				(1.936)
Demographic Controls	Yes	Yes	Yes	Yes
Economic Controls	Yes	Yes	Yes	Yes
Covid Controls	Yes	Yes	Yes	Yes
Observations	5498	4619	4644	2957

Note: ***: 0.01, **: 0.05, *: 0.1. Standard errors in parentheses robust for heteroscedasticity. Credit $\text{guarantees}_i^{22p}$ is the share of government guaranteed new credit over *total* new credit in postcode-municipality i. Every specification is estimated using weighted 2SLS estimators, with the weights in each postal code i being the number of registered voters.

Table 11: Vote transition across political groups, all firms, 2022 presidential election, Round 1

	2022 presidential election, Round 1				
	(1) Far left	(2) Centre left	(3) Incumbent	(4) Centre right	(5) Far right
GARi^{22p}	1.037	-0.099	0.998	-0.928	-0.953
	(0.269)***	(0.130)	(0.361)***	(0.202)***	(0.279)***
Far Left$_i^{17p,t1}$	1.044				
	(0.016)***				
Centre Left$_i^{17p,t1}$		0.467			
		(0.037)***			
Incumbent$_i^{17p,t1}$			0.679		
			(0.029)***		
Centre Right w/o Macron$_i^{17p,t1}$				0.203	
				(0.010)***	
Far Right$_i^{17p,t1}$					1.020
					(0.014)***
Δ CRE$i^{22p-18Q3}$	0.141	0.079	0.390	-0.352	-0.196
	(0.067)**	(0.034)**	(0.085)***	(0.043)***	(0.059)***
Demographic Controls	Yes	Yes	Yes	Yes	Yes
Economic Controls	Yes	Yes	Yes	Yes	Yes
Covid Controls	Yes	Yes	Yes	Yes	Yes
Observations	5498	5498	5498	5498	5498
R^2	0.953	0.828	0.790	0.624	0.958

Note: ***: 0.01, **: 0.05, *: 0.1. Standard errors in parentheses robust for heteroscedasticity. Every specification is estimated using weighted OLS estimators, with the weights in each postcode-municipality i being the number of registered voters.

Table 12: Vote transition across politcal groups, microenterprises, 2022 presidential election, Round 1

	2022 presidential election, Round 1				
	(1) Far left	(2) Centre left	(3) Incumbent	(4) Centre right w/o Macron	(5) Far right
GAR_i^{22p} to microenterprises	1.285	0.424	1.624	-2.253	-2.015
	(0.480)***	(0.227)*	(0.677)**	(0.385)***	(0.493)***
$\text{Far-Left}_i^{17p,t1}$	1.054				
	(0.016)***				
$\text{Centre-Left}_i^{17p,t1}$		0.466			
		(0.038)***			
$\text{Incumbent}_i^{17p,t1}$			0.681		
			(0.030)***		
$\text{Centre-Right w/o Macron}_i^{17p,t1}$				0.199	
				(0.010)***	
$\text{Far-Right}_i^{17p,t1}$					1.022
					(0.014)***
Δ $\text{CRE}_{i,22p-18Q3}$ to microenterprises	0.000	0.000	0.001	-0.001	0.000
	(0.000)	(0.000)	(0.000)***	(0.000)***	(0.000)
Demographic Controls	Yes	Yes	Yes	Yes	Yes
Economic Controls	Yes	Yes	Yes	Yes	Yes
Covid Controls	Yes	Yes	Yes	Yes	Yes
Observations	4621	4621	4621	4621	4621
R^2	0.956	0.829	0.790	0.617	0.959

Note: ***: 0.01, **: 0.05, *: 0.1. Standard errors in parentheses robust for heteroscedasticity. Every specification is estimated using weighted OLS estimators, with the weights in each postcode-municipality i being the number of registered voters.

Internet Appendix

On Government-guaranteed Credit and Populist Support

A Endogeneity: reverse causality

Table A-1: Reverse causality: 2022 presidential election, Round 1

	Weighted regressions			Unweighted regressions		
Dep.var.:	Δ CRE$_{i,22p-18Q3}$	GAR$_i^{22p}$	GAR$_i^{22p}$	Δ CRE$_{i,22p-18Q3}$	GAR$_i^{22p}$	GAR$_i^{22p}$
	(1)	(2)	(3)	(4)	(5)	(6)
FarRight$_i^{17p,t2}$	5.923	-2.064	-2.222	-7.982	-1.391	-1.184
	(22.945)	(4.029)	(3.903)	(18.541)	(4.218)	(4.190)
Δ CRE$_{i,22p-18Q3}$			0.027			0.022
			(0.005)***			(0.004)***
Demographic Controls	Yes	Yes	Yes	Yes	Yes	Yes
Economic Controls	Yes	Yes	Yes	Yes	Yes	Yes
Covid Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	5500	5498	5498	5500	5498	5498
R^2	0.110	0.072	0.089	0.154	0.087	0.096

Note: ***: 0.01, **: 0.05, *: 0.1. Standard errors in parentheses robust for heteroscedasticity. Specification in Columns (1)-(3) are estimated using weighted OLS estimators, with the weights in each postcode-municipality i being the number of registered voters.

Table A-1 presents the findings related to the presidential elections. The analysis involves regressing the far-right vote share in the 2017 presidential elections at the postcode-municipality level on changes in aggregate credit, see Columns (1) and (4), and government-guaranteed credit, Columns (2)-(3) and (5)-(6), within those postcode-municipalities. The hypothesis is that if the French banking system adjusts credit allocation based on electoral patterns, then credit allocation after the 2017 elections would be directed more towards postcode-municipalities with higher populist support.

B Full baseline with displayed control variables

Table B-1: Main results 2022 presidential election, Round 1

Dep.var.: FarRight$_i^{22p,t1}$	(1) Only Guarantees	(2) + Credit Change	(3) + Econ & Demographic Controls	(4) + Covid Controls
GAR$_i^{22p}$	-2.585	-2.253	-1.131	-0.953
	(0.410)***	(0.412)***	(0.286)***	(0.279)***
FarRight$_i^{17p,t1}$	1.004	1.005	1.023	1.020
	(0.013)***	(0.012)***	(0.010)***	(0.014)***
Δ CRE$_{i,22p-18Q3}$		-0.350	-0.151	-0.196
		(0.106)***	(0.060)**	(0.059)***
Turnout$_i^{22p-t1}$			-4.278	0.648
			(1.928)**	(1.923)
Registered voters (log)$_i^{22p,t1}$			0.247	0.237
			(0.058)***	(0.058)***
Old share$_i^{2019}$			0.231	0.215
			(0.014)***	(0.014)***
Young share$_i^{2019}$			0.014	0.014
			(0.022)	(0.022)
Unemployment rate$_i^{2019}$			0.135	0.155
			(0.024)***	(0.026)***
Higher education share$_i^{2019}$			-0.036	-0.047
			(0.018)**	(0.020)**
High school share$_i^{2019}$			0.114	0.082
			(0.029)***	(0.029)***
Vocational share$_i^{2019}$			-0.131	-0.111
			(0.023)***	(0.023)***
Population growth$_i^{2019-1999}$			0.019	0.013
			(0.003)***	(0.003)***
Share female population$_i^{2019}$			0.083	0.119
			(0.048)*	(0.046)**
Share of immigrants$_i^{2019}$			-0.075	-0.063
			(0.013)***	(0.015)***
Standard of living (log)$_i^{2019}$			10.288	10.696
			(0.970)***	(0.988)***
Share of enterprises above 50 employees$_i^{2019}$			-0.166	-0.150
			(0.024)***	(0.024)***
Share of startup enterprises$_i^{2019}$			-0.023	-0.020
			(0.004)***	(0.004)***
COVID-19-impacted industries$_i^{2019-2017}$			-2.015	-2.138
			(0.417)***	(0.412)***
COVID-19 hospital occupancy$_{dep}$				-0.017
				(0.009)*
COVID-19 deaths in hospital$_{dep}$				0.208
				(0.970)
COVID-19 incidence rate$_{dep}$				0.005
				(0.002)***
Observations	5593	5589	5573	5498
R^2	0.917	0.918	0.956	0.958

Note: ***: 0.01, **: 0.05, *: 0.1. Standard errors in parentheses robust for heteroscedasticity. Every specification is estimated using weighted OLS estimators, with the weights in each postcode-municipality i being the number of registered voters.

Table B-2: Main results 2022 presidential election, Round 2, Showing all Control Variables

Dep.var.: FarRight$_{i,2022p-t2}$	(1) Only Guarantees	(2) + Credit Change	(3) + Econ & Demographic Controls	(4) + Covid Controls
GAR$_i^{22p}$	-3.392	-2.843	-1.689	-1.577
	(0.348)***	(0.332)***	(0.244)***	(0.244)***
FarRight$_i^{17p,t2}$	1.004	1.003	0.896	0.915
	(0.012)***	(0.013)***	(0.006)***	(0.007)***
Δ CRE$_{i,22p-18Q3}$		-0.571	-0.426	-0.407
		(0.080)***	(0.055)***	(0.055)***
Turnout$_i^{22p-t2}$			-18.305	-18.719
			(1.695)***	(1.863)***
Registered voters (log)$_i^{22p,t2}$			-0.213	-0.199
			(0.087)**	(0.088)**
Old share$_i^{2019}$			0.127	0.123
			(0.012)***	(0.012)***
Young share$_i^{2019}$			-0.079	-0.089
			(0.023)***	(0.022)***
Unemployment rate$_i^{2019}$			-0.016	-0.029
			(0.020)	(0.021)
Higher education share$_i^{2019}$			0.039	0.050
			(0.014)***	(0.016)***
High school share$_i^{2019}$			0.172	0.165
			(0.027)***	(0.027)***
Vocational share$_i^{2019}$			0.171	0.161
			(0.020)***	(0.022)***
Population growth$_i^{2019-1999}$			0.014	0.009
			(0.003)***	(0.003)***
Share female population$_i^{2019}$			-0.150	-0.161
			(0.039)***	(0.039)***
Share of immigrants$_i^{2019}$			-0.046	-0.027
			(0.015)***	(0.015)*
Standard of living (log)$_i^{2019}$			-1.576	-1.478
			(0.697)**	(0.719)**
Share of firms above 50 employees$_i^{2019}$			-0.026	-0.019
			(0.023)	(0.023)
Share of startup firms$_i^{2019}$			-0.012	-0.011
			(0.004)***	(0.004)***
COVID-19-impacted industries$_i^{2019-2017}$			-2.791	-2.742
			(0.435)***	(0.446)***
COVID-19 hospital occupancy$_{dep}$				-0.019
				(0.009)**
COVID-19 deaths in hospital$_{dep}$				-1.649
				(0.795)**
COVID-19 incidence rate$_{dep}$				-0.001
				(0.002)
Observations	5594	5590	5574	5498
R^2	0.955	0.956	0.975	0.976

Note: ***: 0.01, **: 0.05, *: 0.1. Standard errors in parentheses robust for heteroscedasticity. Every specification is estimated using weighted OLS estimators, with the weights in each postcode-municipality i being the number of registered voters.

C Heterogeneity: resilience and pre-existing conditions

Table C-1: Heterogeneity: Firms' turnover and size

Dep.var.: $\text{FarRight}_i^{22p,t2}$	(1) Full Sample	(2) Microenterprises	(3) Small enterprises	(4) Medium enterprises	(5) Large enterprises
GAR_i^{22p}	-1.662				
	(0.385)***				
$\text{TURNOVER}_i^{20Q4-19Q4} > p.5 \times \text{GAR}_i^{22p}$	0.146				
	(0.496)				
GAR_i^{22p}		-4.300			
		(0.753)***			
$\text{TURNOVER}_i^{20Q4-19Q4} > p.5 \times \text{GAR}_i^{22p}$		2.079			
		(0.974)**			
GAR_i^{22p}			-1.284		
			(0.582)**		
$\text{TURNOVER}_i^{20Q4-19Q4} > p.5 \times \text{GAR}_i^{22p}$			-0.707		
			(0.758)		
GAR_i^{22p}				-0.094	
				(0.843)	
$\text{TURNOVER}_i^{20Q4-19Q4} > p.5 \times \text{GAR}_i^{22p}$				-0.564	
				(1.029)	
GAR_i^{22p}					-0.758
					(1.342)
$\text{TURNOVER}_i^{20Q4-19Q4} > p.5 \times \text{GAR}_i^{22p}$					1.402
					(1.568)
Demographic Controls	Yes	Yes	Yes	Yes	Yes
Economic Controls	Yes	Yes	Yes	Yes	Yes
Covid Controls	Yes	Yes	Yes	Yes	Yes
Observations	5498	4620	5011	3808	1545
R^2	0.984	0.976	0.976	0.978	0.982

Note: ***: 0.01, **: 0.05, *: 0.1. Standard errors in parentheses robust for heteroscedasticity. GARi^{22p} is the share of government guaranteed new credit over total new credit in postcode-municipality i. TURNOVER is a dummy variable equal to 1 when the percentage change of firm-level turnover aggregated at postcode-municipality level for the period 2020Q4-2019Q4 is above median. Every specification is estimated using weighted OLS estimators, with the weights in each postal code i being the number of registered voters.

Table C-2: Heterogeneity: 2019 unemployment rate and firm size

Dep.var.: Far-right share$_i^{22p,t2}$	2022 presidential election, Round 2				
	(1) Full Sample	(2) Microenterprises	(3) Small enterprises	(4) Medium enterprises	(5) Large enterprises
GAR$_i^{22p}$	-1.764				
	(0.355)***				
Unemployment rate$_i^{2019} > p.5 \times$ GAR$_i^{22p}$	0.395				
	(0.462)				
Guarantees$_i^{22p}$		-4.217			
		(0.698)***			
Unemployment rate$_i^{2019} > p.5 \times$ GAR$_i^{22p}$		2.177			
		(0.927)**			
Guarantees$_i^{22p}$			-1.532		
			(0.540)***		
Unemployment rate$_i^{2019} > p.5 \times GAR_i^{22p}$			-0.324		
			(0.717)		
Guarantees$_i^{22p}$				-0.385	
				(0.780)	
Unemployment rate$_i^{2019} > p.5 \times$ GAR$_i^{22p}$				-0.168	
				(0.967)	
Guarantees$_i^{22p}$					0.726
					(0.928)
Unemployment rate$_i^{2019} > p.5 \times$ GAR$_i^{22p}$					-0.969
					(1.302)
Demographic Controls	Yes	Yes	Yes	Yes	Yes
Economic Controls	Yes	Yes	Yes	Yes	Yes
Covid Controls	Yes	Yes	Yes	Yes	Yes
Observations	5498	4621	5016	3812	1549
R^2	0.976	0.976	0.976	0.978	0.982

Note: ***: 0.01, **: 0.05, *: 0.1. Standard errors in parentheses robust for heteroscedasticity. GARi^{22p} is the share of government guaranteed new credit over total new credit in postcode-municipality i. Unemployment rate is a dummy variable equal to 1 when the unemployment rate in a postcode-municipality in 2019 is below median. Every specification is estimated using weighted OLS estimators, with the weights in each postal code i being the number of registered voters.

D Turnout and government-guaranteed credit

Table D-1: Turnout and government guaranteed credit, 2022 presidential election, Round 2

Dep.var.:	$\Delta Turnout_{i,22p-17p,t2}$			
	(1) Only Guarantees	(2) + Credit Change	(3) + Econ & Demographic Controls	(4) + Covid Controls
GAR_i^{22p}	0.653	0.713	0.092	0.174
	(0.449)	(0.443)	(0.248)	(0.258)
$\Delta CRE_i^{22p-18Q3}$		-0.063	-0.234	-0.174
		(0.132)	(0.067)***	(0.070)**
Ln(Reg.voters$_{i,22p-17p,t2}$)	1.572	1.633	6.255	5.958
	(1.698)	(1.711)	(2.484)**	(2.568)**
Demographic Controls	No	No	Yes	Yes
Economic Controls	No	No	Yes	Yes
Covid Controls	No	No	No	Yes
Observations	5594	5590	5574	5498
R^2	0.002	0.002	0.445	0.460

Note: ***: 0.01, **: 0.05, *: 0.1. Standard errors in parentheses robust for heteroscedasticity. The dependent variable is the change in turnout proportion of registered voters between the 2022 and the 2017 presidential election (second round). The Ln(Reg.voters$_{i,22p-17p,t2}$) is the log change of the registered voters between the 2022 and the 2017 presidential elections (second round). Every specification is estimated using weighted OLS estimators, with the weights in each postcode-municipality i being the number of registered voters.

Table D-2: Heterogeneity: Turnout and guaranteed credit, 2022 presidential election, Round 2

Dep.var.:	Far-right share$_{i,2022p-t1}$			
	(1) Only Guarantees	(2) + Credit Change	(3) + Econ & Demographic Controls	(4) + Covid Controls
GAR$_i^{22p}$	-1.708	-1.060	-1.034	-1.005
	(0.371)***	(0.372)***	(0.339)***	(0.339)***
$\Delta Turnout_{i,22p-17p,t2}$	1.672	1.672	0.895	0.841
	(0.185)***	(0.185)***	(0.162)***	(0.159)***
GAR$_i^{22p}$ $\times$ Δ Turnout$_{i,22p-17p,t2}$	-2.811	-2.955	-0.962	-0.832
	(0.563)***	(0.560)***	(0.461)**	(0.459)*
Far-right share$_i^{17p,t2}$	0.966	0.965	0.893	0.903
	(0.004)***	(0.004)***	(0.006)***	(0.007)***
Δ CRE$_i^{22p-18Q3}$		-0.586	-0.390	-0.391
		(0.060)***	(0.053)***	(0.053)***
Demographic Controls	No	No	Yes	Yes
Economic Controls	No	No	Yes	Yes
Covid Controls	No	No	No	Yes
Observations	5594	5590	5574	5498
R^2	0.963	0.964	0.975	0.975

Note: ***: 0.01, **: 0.05, *: 0.1. Standard errors in parantheses robust for heteroscedasticity. Every specification is estimated using weighted OLS estimators, with the weights in each postcode-municipality i being the number of registered voters. The $\Delta Turnout_{i,22p-17p,t2}$ variable is the change in turnout proportion of registered voters between the 2022 and the 2017 presidential election (second round).

E Robustness checks: Variable specification

Table E-1: Different specifications of main vaiables, 2022 presidential election, Round 2

Dep.var.:	$\text{FarRight}_i^{22p,t2}$			Δ $\text{FarRight}_{t2}^{i,22p-17p}$
	(1)	(2)	(3)	(4)
	Guarantee dummy	Guarantee squared	No $17p, t2$ control	Dep. var.: Changes
GAR dummy_i^{22p}	-0.898			
	(0.217)***			
GAR_i^{22p}		-5.397	-1.915	-1.546
		(0.811)***	(0.654)***	(0.247)***
GAR_i^{22p}				
$\times$ GAR_i^{22p}		5.980		
		(1.138)***		
Δ $\text{CRE}_i^{22p-18Q3}$	-0.448	-0.409	-0.364	-0.411
	(0.057)***	(0.054)***	(0.142)**	(0.056)***
$\text{Far-right share}_i^{17p,t2}$	0.915	0.915		
	(0.007)***	(0.007)***		
Demographic Controls	Yes	Yes	Yes	Yes
Economic Controls	Yes	Yes	Yes	Yes
Covid Controls	Yes	Yes	Yes	Yes
Observations	5500	5498	5498	5498
R^2	0.976	0.976	0.841	0.447

Note: ***: 0.01, **: 0.05, *: 0.1. Standard errors in parentheses robust for heteroscedasticity. Every specification is estimated using weighted OLS estimators with the weights in each postcode-municipality i being the number of registered voters. In column (4) the dependent variable is the percentage point change in the vote share between 2017 and 2022.

F Robustness checks: model specification

Table F-1: Outlier treatment and weighting, 2022 presidential election, Round 2

Dep.var.: $\text{FarRight}_i^{22p,t2}$	2022 presidential election, Round 2			
	(1) Unwisorized	(2) 95% winsorized	(3) Unweighted	(4) excl. Paris
GAR_i^{22p}	-1.745	-1.674	-1.554	-1.463
	(0.247)***	(0.261)***	(0.228)***	(0.240)***
Δ $\text{CRE}_{i,22p-18Q3}$	-0.181	-0.547	-0.385	-0.385
	(0.060)***	(0.069)***	(0.054)***	(0.054)***
$\text{FarRight}_i^{17p,t2}$	0.915	0.915	0.879	0.917
	(0.007)***	(0.007)***	(0.007)***	(0.007)***
Demographic Controls	Yes	Yes	Yes	Yes
Economic Controls	Yes	Yes	Yes	Yes
Covid Controls	Yes	Yes	Yes	Yes
Credit Winsorized	No	95%	99%	99%
Weighted	Yes	Yes	No	Yes
Observations	5498	5498	5498	5497
R^2	0.976	0.976	0.948	0.973

Note: ***: 0.01, **: 0.05, *: 0.1. Standard errors in parentheses robust for heteroscedasticity. Every specification is estimated using weighted OLS estimators with the weights in each postcode-municipality i being the number of registered voters. Columns (1) uses unwinsorized data. Column (2) shows results with credit variables (government guarantees and change in overall credit) winsorized at 95% level. Column (3) does not weight observations by number of registered voters. Column (4) excludes Paris from the sample.

G Robustness checks: fractional response model

Table G-1: Fractional regression results, 2022 presidential election, Round 2

Dep.var.: FarRight$_i^{22p,t1}$	(1) Only Guarantees	(2) + Credit Change	(3) + Econ & Demographic Controls	(4) + Covid Controls
GAR_i^{22p}	-3.310	-2.746	-1.422	-1.230
	(0.332)***	(0.326)***	(0.238)***	(0.236)***
FarRight$_i^{17p,t1}$	0.929	0.928	0.846	0.865
	(0.006)***	(0.006)***	(0.006)***	(0.008)***
$\Delta CRE_{i,22p-18Q3}$		-0.583	-0.348	-0.333
		(0.075)***	(0.056)***	(0.056)***
Demographic Controls	No	No	Yes	Yes
Economic Controls	No	No	Yes	Yes
Covid Controls	No	No	No	Yes
Observations	5575	5590	5574	5498

Note: ***: 0.01, **: 0.05, *: 0.1. Delta method standard errors in parentheses. Coefficient shown are average marginal effects. Every specification is estimated using fractional logit estimators, with the weights in each postal code i being the number of registered voters. Credit guarantees$_i^{22p}$ is the share of government guaranteed new credit over total new credit in postcode-municipality i.

H Different enterprise sizes - all parties

Table H-1: Vote transition across politcal groups, small-sized enterprises, 2022 presidential election, Round 1

	2022 presidential election, Round 1				
	(1) Far left	(2) Centre left	(3) Incumbent	(4) Centre right w/o Macron	(5) Far right
GAR_i^{22p} to small enterprises	1.131	-0.115	0.732	-0.819	-1.199
	(0.363)***	(0.164)	(0.473)	(0.290)***	(0.386)***
Far-$Left_i^{17p,t1}$	1.048				
	(0.016)***				
Centre-$Left_i^{17p,t1}$		0.467			
		(0.038)***			
$Incumbent_i^{17p,t1}$			0.681		
			(0.029)***		
Centre-Right w/o $Macron_i^{17p,t1}$				0.202	
				(0.010)***	
$Far\text{-}Right_i^{17p,t1}$					1.021
					(0.014)***
Δ $CRE_{i,22p-18Q3}$ to small enterprises	0.004	-0.002	0.009	-0.009	-0.002
	(0.003)	(0.001)	(0.005)	(0.002)***	(0.003)
Demographic Controls	Yes	Yes	Yes	Yes	Yes
Economic Controls	Yes	Yes	Yes	Yes	Yes
Covid Controls	Yes	Yes	Yes	Yes	Yes
Observations	5016	5016	5016	5016	5016
R^2	0.954	0.830	0.789	0.616	0.958

Note: ***: 0.01, **: 0.05, *: 0.1. Standard errors in parentheses robust for heteroscedasticity. Every specification is estimated using weighted OLS estimators, with the weights in each postcode-municipality i being the number of registered voters.

Table H-2: Vote transition across politcal groups, medium-sized enterprises, 2022 presidential election, Round 1

	2022 presidential election, Round 1				
	(1) Far left	(2) Centre left	(3) Incumbent	(4) Centre right w/o Macron	(5) Far right
GAR_i^{22p} to medium enterprises	0.654	-0.393	1.318	-0.898	0.501
	(0.512)	(0.224)*	(0.694)*	(0.375)**	(0.665)
Far-$Left_i^{17p,t1}$	1.049				
	(0.018)***				
Centre-$Left_i^{17p,t1}$		0.462			
		(0.043)***			
$Incumbent_i^{17p,t1}$			0.690		
			(0.035)***		
Centre-Right w/o $Macron_i^{17p,t1}$				0.196	
				(0.011)***	
Far-$Right_i^{17p,t1}$					1.031
					(0.016)***
Δ $CRE_{i,22p-18Q3}$ to medium enterprises	0.001	-0.001	0.002	-0.004	-0.003
	(0.002)	(0.001)	(0.003)	(0.001)***	(0.003)
Demographic Controls	Yes	Yes	Yes	Yes	Yes
Economic Controls	Yes	Yes	Yes	Yes	Yes
Covid Controls	Yes	Yes	Yes	Yes	Yes
Observations	3812	3812	3812	3812	3812
R^2	0.957	0.832	0.792	0.633	0.961

Note: ***: 0.01, **: 0.05, *: 0.1. Standard errors in parentheses robust for heteroscedasticity. Every specification is estimated using weighted OLS estimators, with the weights in each postcode-municipality i being the number of registered voters.

Table H-3: Vote transition across politcal groups, large enterprises, 2022 presidential election, Round 1

	2022 presidential election, Round 1				
	(1) Far left	(2) Centre left	(3) Incumbent	(4) Centre right w/o Macron	(5) Far right
GAR_i^{22p} to large enterprises	-1.144	-0.535	-0.158	0.053	-0.179
	(1.062)	(0.387)	(1.299)	(0.560)	(0.871)
Far-$Left_i^{17p,t1}$	1.071				
	(0.027)***				
Centre-$Left_i^{17p,t1}$		0.505			
		(0.037)***			
$Incumbent_i^{17p,t1}$			0.662		
			(0.053)***		
Centre-Right w/o $Macron_i^{17p,t1}$				0.186	
				(0.013)***	
$Far\text{-}Right_i^{17p,t1}$					1.042
					(0.023)***
Δ $CRE_{i,22p-18Q3}$ to large enterprises	-0.000	-0.000	-0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)
Demographic Controls	Yes	Yes	Yes	Yes	Yes
Economic Controls	Yes	Yes	Yes	Yes	Yes
Covid Controls	Yes	Yes	Yes	Yes	Yes
Observations	1549	1549	1549	1549	1549
R^2	0.965	0.857	0.808	0.674	0.963

Note: ***: 0.01, **: 0.05, *: 0.1. Standard errors in parentheses robust for heteroscedasticity. Every specification is estimated using weighted OLS estimators, with the weights in each postcode-municipality i being the number of registered voters.

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